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World Over Production of Crude Looms, A. P. I. Head to Tell Conference

COLORADO SPRINGS, June 14

OVER PRODUCTION of crude may become a world wide problem in future years, far over-shadowing that caused by the present surplus production in this country, E. W. Clark, vice-president, Union Oil Co. of California and president of the American Petroleum Institute, was to tell the standardization conference of the institute at its opening session tomorrow.

"Since the war more governmental and industrial energy and effort has been devoted to seeking out the world's resources of petroleum than to any other field of industrial enterprise," Mr. Clark was to say. "We may not close our eyes to the fact that this search has so far succeeded as to bring the world's petroleum industries face to face with conditions which certainly dwarf the significance of a few local and temporary phenomena of overproduction here in the United States.

"This is a situation in which we may well invoke the serious thought and earnest co-operation of both political and industrial statesmanship. It does not concern merely a single American industry; it has vitally to do with every power-making, power-using, power-dependent industry in this twentieth century world.

"It not only deserves to be recognized as of those gigantic proportions, but it demands to be considered and dealt with in the light of such a view as I am roughly sketching for you."

IN HIS address Mr. Clark was to ask the oil industry itself to study the situation with a broader point of view than it has heretofore used in studying future production possibilities. Along with this he bespoke the support and assistance of the government in dealing with this arising world condition.

"For one, I do not doubt that the Federal Oil Conservation Board and the national administration, if this entire condition be frankly and effectively presented, would be ready to join us in a far-reaching constructive program aiming to avert an economic disaster of international proportions and the gravest character."

"Permit me a moment to suggest that the present critical situation in our history is not one to be considered merely in terms of Seminole, Earlsboro, Spindletop, Panhandle, or any other momentarily flush area," he was to say earlier in his address. "I submit that we need at this time to take a world view, to think in terms of a decade or a generation, and not of a few months or a year.

"LESS than 20 years ago Russia produced more petroleum in a year than the United States. With the epoch of turbulence and revolution, Russia sank to unimportance, while the United States rose to dominance. But we know Russia possesses enormous oil resources. We know that the present Russian government hopes to turn these petroleum resources into financial support for its desperately weakened economic establishment. We may be sure that before many years Russia will somehow become once more a first-class power in petroleum.

"Then glance to the south of us, and just over the horizon of the Caribbean we see Venezuela, with a potential production as great as was that of the United States only a few years ago. We recognize the assured possibilities of Colombia. On the other side of the world, in the great Persian-Mesopotamian area of the Middle East, we find still another factor of potential and enormous competition."

Reverting to the present domestic overproduction, Mr. Clark planned to say he believed the remedy would come through evolution and not revolution. To that end he intended the industry to use the resources of the institute to bring together all the known facts about oil production which have been collected individually.

"Through this medium the whole industry should be correctly informed of the knowledge gained by practical research and experimentation, so that individual units might carry on similar work or adapt their methods to conform to new knowledge," he planned to propose.

Mr. Clark personally believes it might be necessary to recommend that state legislation be adopted to conserve gas pressure in oil pools being developed. This course should be taken, he said, only after the decision is reached that co-operation within the industry in this direction cannot be secured.

"THE Federal Oil Conservation Board has a sincere and earnest desire to help this industry solve its most serious problem," Mr. Clark was to say. In my judgment the industry will make an egregious error if it does not embrace the opportunity to work out for itself, with the intelligent co-operation of this agency of government, a permanent national policy with respect to oil production."

Standard Joins Virginia Jobbers in Drafting Code of Ethics

By Telegraph

RICHMOND, Va., June 11

A TENTATIVE code of ethics for oil and gasoline distributors of Virginia drafted by a committee representing major and minor distributors, was presented to the Virginia Oil Men's Association today. If adopted by the association the code will be presented to the Federal Trade Commission at Washington for approval.

The committee that drafted the code, was comprised of E. A. Holbein, New York, Standard Oil Co. of New Jersey; William Thompson, Norfolk, The Texas Co.; Senator T. Gray Haddon, Allen G. Collins, and Overton D. Dennis, Richmond.

The code provides for the elimination of secret rebates, discounts, rentals of signs, and lease and license agreements which members of the association regard as unethical business practices. It is predicted that exercise of the code will result in saving to consumers 1 cent a gallon on gasoline.

The committee to draft the code was appointed after a hearing here May 25 on a complaint of Independent distributors of Virginia against the major distributors in the state. The hearing was before Edgar A. McCulloch of the Federal Trade Commission. A member of the commission was present today to hear the report.

The case of the small Independents was presented by J. B. Belk, Charlottesville, president of the association, who sought an investigation of the oil industry.

The lease and license agreement, whereby an oil company enters into a lease agreement with a dealer for a period of years at high rentals, and, at the same time, licenses the dealer to sell the company's gasoline exclusively for one year, charging the dealer a nominal sum (usually $1), for the license, is one part of the warfare between the major and minor companies.

The payment of very high rentals to dealers for the exclusive display of advertising; the payment of bonuses to dealers by oil companies; contracts allowing secret rebates or special discounts to dealers, below the oil company's published tank wagon prices; furnishing to dealers either buildings, driveways, canopies, air-compressors, pumps, tanks, electric lights, etc., by the oil companies at rentals, sometimes as low as $1 per year; factor's agreements, whereby the oil company makes an agreement with the dealer to handle gasoline on a consignment basis at a stated compensation per gallon, and allowance of special discount to motor truck operators and sale of coupon books to consumers at a special discount, are all some of the questions which were argued and discussed at the May 25 hearing, at the instigation of Mr. Belk.

J. BURR GIBBONS

of Tulsa, who has been chosen general manager of the Fourth International Petroleum Exposition and Congress, to be held at Tulsa the week of Sept. 24 to Oct. 1. Mr. Gibbons is president of the Hofstra Mfg. Co., Tulsa and is a leader in civic activities.

Coming Meetings

Committee D-2, A. S. T. M., French Lick, Ind., June 20, 21, 22, 23, 24.

Illinois Petroleum Marketers Association, Orlando Hotel, Decatur, Ill., June 22.

Oklahoma Oil Jobbers Association, Oklahoma Club, Oklahoma City, Okla., June 23.

Michigan Independent Oil Men's Association, Mackinac Island, Mich., July 14, 15.

National Petroleum Association, Hotel Traymore, Atlantic City, N. J., Sept. 20, 21, 22.

Fourth International Petroleum Exposition and Congress, Tulsa, Sept. 24 to Oct. 1.

Petroleum Section, National Safety Council, Hotel Stevens, Chicago, Sept. 27 to 30.

American Petroleum Institute, Hotel Stevens, Chicago, Dec. 6, 7, 8.

Virginia Jobbers Plan Ocean Terminal

Special—By Telegraph

RICHMOND, Va., June 14.—Members of the Virginia Independent Oil Men's Association who are convening here, are considering establishing an ocean terminal at Portsmouth or Norfolk. It is proposed to form a corporation with capital of about $150,000 and to supply Independent jobbers with oil and gasoline.

It is tentatively planned to contract for a minimum of 60,000 barrels of U. S. Motor gasoline a month on a basis of about 4.50 cents under the posted tank wagon price of the Standard Oil Co. of New Jersey. Gasoline and oil would be shipped by rail to New Orleans and by water to the Virginia terminal.

Several Mid-Continent and Gulf refiners are said to be interested in the project. J. B. Belk, president of the Virginia association, is asking jobbers to raise 60 to 65 per cent of the cost of the terminal. Operating costs for the project are estimated at $30,000 a year. Handling charges to be assessed against are estimated at $72,000 a year, leaving a profit of approximately $42,000 a year which would be refunded to the jobbers as a dividend or left in the business as working capital.

New Hope for Recovery of Miss Ann Barth

CHICAGO, June 10.—Ann Barth, assistant in the office of James A. Gilmore, secretary, American Oil Men's Association, after being near death for more than a week is on her way to recovery. Miss Barth is well known among western oil men, having been in oil association work since the late H. G. James first accepted the secretaryship of A.O.M.A. She managed the office almost without suggestion from anyone during the eight months of illness which preceded Mr. James death.

Miss Barth's ill health came suddenly about a month ago, originating apparently from her teeth. At her dentist's urge she went to a hospital and underwent an operation. Surgeons despaired of her recovery and the last rites of the church were administered before her condition improved.

Let's All Go To Niagara

NIAGARA FALLS, Ont., June 11.—An invitation has been extended by L. C. Hockenbury, proprietor of the Niagara Falls Oil Co. at 360 Seneca Ave. here, to all members of the Independent Oil Men of America to visit him while stopping at the Ontario side of Niagara Falls. Mr. Hockenbury promises "a pleasant visit".

Simple Method Of Testing Pour Point Gives Same Result Every Time

By Paul Truesdell

N. P. N. STAFF WRITER

CLEVELAND, June 10. A METHOD worked out by MacLean Houston, production manager of the United Refining Co., Warren, Pa., seems to bid fair, if it can be established as a universal standard in the industry, to wipe out the many troubles that refiners have always encountered in determining the pour test of an oil and in meeting pour test specifications set up by buyers.

Probably every refiner who ever made cylinder stock or bright stock has had trouble at some time or other with the cold test proposition. If he was selling oil to foreign buyers or to those who for some reason made a special point of low cold test, his troubles generally have been numerous. In fact, the trouble often starts with that very term, "cold test." What does it mean, the temperature at which the oil becomes cloudy and stiffens or the lowest temperature at which it will move in a test?

This source of trouble has been somewhat eliminated by cutting out "cold test" and substituting "pour" test. However, there are some refiners and some buyers that still use the vague term, "cold test" and disputes frequently arise as to its interpretation. The accepted test and testing method for cloud and pour point is Method 20.11 of the Federal Specifications board, which is the same as A.S.T.M. Method D97-22T. It is contained in Technical Paper 323A of the Bureau of Mines.

AFTER carefully prescribing and specifying the standard apparatus for making the pour test, Technical Paper 323A goes on to describe the procedure as follows:

"The oil to be tested shall be brought to a temperature of 90 degrees F. or to a temperature 15 degrees higher than its pour point if this pour point is above 75 degrees F. The oil shall then be poured into the test jar to a height not less than 2 or more than 2¼ inches.

"The jar may be marked to indicate the proper level.

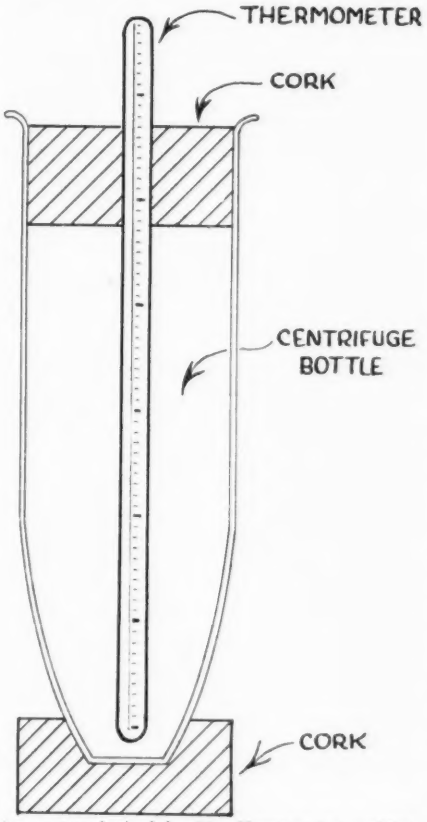
"The test jar shall be tightly closed by the cork carrying the test thermometer in a vertical position in the center of the jar with the thermometer bulb immersed so that the beginning of the capillary shall be one-eighth inch below the surface of the oil.

".....After the oil has cooled enough to allow the formation of paraffin wax crystals great care shall be taken not to disturb the mass of the oil nor to permit the thermometer to shift in the oil. Any disturbance of the spongy network of wax crystals will lead to low and fictitious results.

"The temperature of the cooling bath shall be adjusted so that it is below the pour point of the oil by not less than 15 nor more than 30 degrees F., and this temperature shall be maintained throughout the test. The jacket containing the test jar shall be supported firmly in a vertical position in the cooling bath so that not more than 1 inch of the jacket projects out of the cooling medium.

"AT EACH test thermometer-reading which is a multiple of 5 degrees F., the test jar shall be removed from the jacket carefully and shall be tilted just enough to ascertain whether the oil around the thermometer remains liquid. As long as the oil around the thermometer flows when the jar is tilted slightly, the test jar shall be replaced in the jacket. The complete operation of removal and replacements shall require not more than three seconds. As soon as the oil around the thermometer does not flow when the jar is tilted slightly, the test jar shall be held in a horizontal position for exactly five seconds and observed carefully. If the oil around the thermometer shows any movement under these conditions, the test jar shall be immediately replaced in the jacket and the same procedure shall be repeated at the next temperature reading 5 degrees F. lower. In determining the pour point of oils it shall be noted that the first movement of oil sometimes is not around the thermometer but from the sides of the test jar. In such cases, this movement shall be considered in making the test. As soon as a temperature is reached at which the oil around the thermometer shows no movement when the test jar is held in a horizontal position for exactly five seconds, the test shall be stopped.

"The lowest reading of the test thermometer, corrected for error if necessary, at which the oil around the thermometer shows any movement when the test jar is held in a horizontal position for exactly five seconds, shall be recorded as the pour point. It shall be noted that the pour point is the temperature 5 degrees F. above the solid point or temperature at which the test is discontinued."



Apparatus devised by Mr. Houston for making pour test.

BUT WHAT is a test? Mr. Webster's dictionary defines it as, "subjection to conditions that show the real character of a person or thing in a certain particular. "Accepting that definition, the A.S.T.M. test is a poor one because it does not show the character of the oil as regards pour point except for the moment at which the test is made.

An oil, taken warm from the filter and tested by the A.S.T.M. method, in most rigorous compliance with its term, will give a certain pour test. The same oil, taken from a drum at room temperature a few hours later, will show an entirely different pour point. The next day the pour point, determined by the same method, will be still different.

This is where the trouble arises between refiner and buyer. The refiner takes the pour test carefully, finds that it meets the requirements

set by the buyer, barrels it and ships it. When the buyer takes a sample out of a drum and puts it through the A.S.T.M. test he finds it does not meet his specifications at all.

Whether the A.S.T.M. pour test really gives any index to the character of the oil at all may be doubted, inasmuch as the oil is the same on every test and presumably would behave the same way in use, although the tests show the pour point to be different on every occasion.

So serious was this problem to the eastern refiners that a committee of them met with Committee D-2 of the A.S.T.M. at Cleveland last October to ask for help in obtaining a modification of the pour test method that would make the test reproducible by the buyer. A subcommittee was named by F. A. Hull, chairman of Committee D-2, of which R. R. Matthews, Roxana Petroleum Corp., was chairman, to investigate the problem and make recommendations as to a change in the pour point determination method.

THIS subcommittee, it is likely, will have something to say at the coming meeting of Committee D-2 to be held at French Lick., Ind., beginning June 20.

In the meantime, Mr. Houston has been working on the problem and has devised a method which fills the need as far as his company is concerned. Of course, to make it of much value it would have to be universally used by both buyer and seller—become the standard testing method of the trade.

Mr. Houston told the eastern refiners something about his method at the spring meeting of the National Petroleum Association at Cambridge Springs in April, but he did not describe it. Here it is as he described it to the writer.

Instead of using the test jar prescribed in the A.S.T.M. method, Mr. Houston takes an ordinary cone-bottomed bottle, used in refinery laboratories for making the centrifuge test on certain oils, and cuts off the tip of the cone bottom to make a hole about three-quarters of an inch in diameter.

The accompanying drawing shows what his apparatus looks like. A flat cork is whittled out so that the cut-off bottom of the bottle fits into it snugly. About 40 cubic centimeters of oil to be tested is then put into the bottle and the top is closed with a cork carrying a thermometer in a vertical position in the center of the bottle. The thermometer is shoved down until the bulb is about one-eighth inch from the cork at the bottom. The bottle is then placed in a jacket surrounded by an ice-water bath (the apparatus used for chilling oil in the standard pour test method is used by Mr. Houston) until the oil solidifies. No attention is to be paid to the temperature in the chilling.

When the oil is solid the bottle is taken out of the bath and the cork carefully removed from the bottom. Then the bottle is suspended in a rack, vertically, at room temperature, with a piece of clean paper beneath the bottom. The bottle is carefully watched. In about 15 minutes the oil will warm up to the point at which a drop falls from the opening at the bottom. The temperature at which this occurs is read and reported as the pour test of the oil.

Contrary to results obtained by the standard pour test method, Mr. Houston gets the same result on the same oil every time, regardless of the history of the oil before the test is made. Oil taken warm from the filterhouse and chilled down gives the same result as a sample of the same oil that has stood in a drum at room temperature or colder for days.

MR. HOUSTON has submitted his method, which it is recognized is crude in its present form, to the subcommittee of the A.S.T.M. for consideration and it would seem that it might well be standardized, the rough edges smoothed off, and be made the yardstick of the trade.

W. H. Barber Author of Popular Book on Bridge Whist

A LOT of people in the oil business know W. H. Barber, head of the W. H. Barber Co., Minneapolis, as an oil man of long years' experience; but is doubtful if many know him as the author of a book on bridge playing.

Nevertheless, Mr. Barber's work on this subject has run through several editions and many thousands of copies have been distributed. It is not unusual for persons to secure two or three copies of this work, to lend to the enjoyment of their friends.

Mr. Barber himself takes quite an active part in the distribution of his book on bridge. He is well known in Minneapolis for the interest he has taken in this work and it is not unusual for people to tell him they know of him through the book.

The title of this book is "What Barber Knows about Bridge Whist". It is a very small pocket size book with a paper cover. Mr. Barber presents a copy gravely to anyone who asks and inside is—nothing, blank page after blank page of it.

The W. H. Barber Co. is one of the oldest of Independent marketing companies. It was established prior to 1904. Mr. Barber has been active in the Independent marketing industry and was always to be found at conventions of marketers, when the whole membership of the association was only a small number of men. The last few years, however, he has been letting others in his company take his place at conventions.

He started in the oil business in 1877 with a Cleveland company, selling greases and petrolatums. There was no gasoline business then.

W. H. BARBER
Head of the W. H. Barber Co., Minneapolis.

Marland Builds Tanker

PONCA CITY, June 11.—A new 8,000 ton tank ship is being constructed for the Marland companies at Rotterdam, Holland. The ship originally was scheduled for completion by March, 1928, but recent word was that it will be delivered this year. It will be put into service on the Atlantic.

TULSA—Don J. Wallace, director of the Petroleum Safety Council of the Mid-Continent Oil & Gas Association, devoted the first half of June to conducting foremen's safety meetings in Louisiana. A number of safety clubs were formed in the principal producing districts. Mr. Wallace will hold similar meetings throughout Oklahoma in the near future.

Revision of Lease Contracts Demanded by Modern Producing Conditions

By Lawrence E. Smith

N. P. N. STAFF WRITER

TULSA, June 13

THERE is a growing opinion that the time is at hand when revision of drilling lease contracts should be undertaken.

No definite plan has been suggested by any number of oil producers, but the obligations the present leases throw on producers, the weight of which is shown forcibly by the Seminole experience, indicate that some measure of relief might be obtained through modification of the contracts now used.

In 1924, a committee of the Mid-Continent Oil & Gas Association after long study drew up the form "Mid-Continent 88", intended to replace the old "Producers 88." It was a big improvement over the old form and, had its provisions been applied to every lease taken in the Seminole pool, operators would find it somewhat easier to delay completions of wells not compelled by offset requirements.

Something more is needed, however, and there is no general agreement as to what it is. One suggestion frequently made is that the future lease be revised to provide that, in the event of overproduction occasioning congestion of pipe line and storage facilities in the field and unprofitable prices, a moratorium, so to speak would be declared and the operator be relieved of drilling obligations until economic conditions warranted development.

That would necessitate some agency to determine whether necessity for curtailment existed. No landowner could be found, probably, who would vest such decision in the lessee. It would probably add another to the duties of the state utilities commission.

Considerable of the leasing in the Seminole was done within the past five years and many of the leases were for five years or even shorter periods. The form of lease adopted by the Mid-Continent Oil & Gas Association is for 10 years and, had it been generally used, much of the drilling called for in that district now would not be necessary at this time.

Oil companies taking original leases are generally using the Mid-Continent form, but where they take leases by assignment they find that most any form that was obtainable by the lease broker was used.

An important provision in several of them is the "commence" clause. On this subject, Rush Greenslade, vice-president of the Gypsy Oil Co., in an address before the Mid-Continent section of the American Institute of Mining and Metallurgical Engineers, in March 1924, said:

". . . leases may be termed 'complete' leases or 'commence' leases, which is a very vital distinction. I can illustrate this by the provisions of this Mid-Continent form 88. This is a lease for 10 years and it must be producing within that period to continue longer, but the lease provides that, if the lessee shall commence to drill a well within the term of the lease, or any extension thereof, the lessee shall have the right to drill such well to completion with reasonable diligence, and if oil or gas, or either of them, be found in paying quantities, the lease shall continue and be in full force and effect. In other words, if you commence a well within the term you will have the right to go ahead and complete the well and hold the lease regardless of whether it is after the term; but if that provision is not in the lease, the well must be completed and producing within the primary term."

AT THIS time, the provision is of large importance, for it means in the Seminole district a means to delay starting a well for several months. A lease which expires next December, for example, must have a well started in the near future, if it is a "complete" lease, that is, calling for completion of a well by that time. In that district, four months is none too long to allow for the completion of a well; more time should be allowed to take care of fishing jobs and other drilling troubles that may arise. If the lease is a "commence" contract, the operator can wait until just before date of expiration to begin work. Unfortunately for the progress of the wildcat shut-down movement, many leases are of the "complete" variety and the expiration date is in sight.

Fundamentally, the business of producing oil rests upon the covenant between the owner of the mineral rights and the operator who has, through lease, gained the right to drill for, and produce oil and gas. Understanding of this fact is not general. Neither is there thorough understanding in the industry itself of the complicating feature of division of royalty interest.

Within the past five years the trading in royalties has become, in the Mid-Continent, at least, an extensive business. One oil executive recently called it "another major division of the industry." The lessor usually is willing to sell a part of the one-eighth interest he has retained in the oil and gas produced. The part he sells is more often than not divided into very small parts. There are a number of companies who specialize in the purchase and re-sale of royalties, and, of course, numerous individuals who do the same thing. Such fractions constitute either divided or undivided interests in the oil and gas rights. The broker may buy, say, a one-half royalty under 160 acres, or he may buy part of the royalty under only part of the farm.

KAY county, Okla., is a notable example of the minuteness of the division of royalty interests. Mapping companies find it difficult at times to get all the names of the royalty owners within the boundaries of a lease, and sometimes that can't do it at all. There may be anywhere from one to 200 royalty owners on a single quarter section. Seminole district properties are not quite so bad, but there are usually enough divided interests to make it difficult for the operator, especially if he wants to renew the lease or pay advance royalty to avoid drilling.

Now, this royalty interest, unlike the lease, is perpetual. It does not terminate with the lease. It is permanent title to part of the oil and gas when and if produced. The royalty owner, therefore, is party to any agreement that affects the status of the lease. No matter how small his interest, he must be consulted by the operator if the latter wishes to renew the lease to extend the period in which he must drill.

The situation is getting worse all the time. Royalty buyers are now going far ahead of development. They are going into counties far removed, both geographically and in years, from oil production, and getting their fingers on anything that may develop in the future. A favorite method, for example, is to go into the wildcat territory and take leases. The leaser will offer, say, 50 cents an acre for the lease, a dollar an acre if the farmer will assign half the royalty. He has then bought two kinds of property. He has a lease which he may sell for what he paid or more and he has a half interest in the royalty oil or gas that may sometime

be developed. He and his heirs and assigns have their hand on that tract forever. His lease may expire but he will have to be consulted if anyone ever again wants to lease that tract.

Of course, there is no way of stopping the practice. The owner of the land is free to sell it or the minerals thereunder in any manner he pleases and anyone is free to buy it.

The path of the operator might be made a little smoother, though, and there are many who believe some thought should be devoted to the royalty phase of the producing business. About all that could be done would be to reduce the number of persons with whom the operator negotiates. In the departmental form of lease, now used on all restricted allotted Indian lands, provision is made that, if there are as many as four or more persons entitled to royalties, rentals, advance royalties, they shall designate an agent, or trustee, to receive all the money due the group and distribution shall be made by the agent. The operating company may withhold such payments without impairing its status under the lease until such agent shall be appointed and the operator is not responsible in any sense for the proper distribution of the moneys.

A similar provision was made in Mid-Continent form 88. It is helpful in that it reduces the accounting work necessary if the operator makes distribution to all who are entitled to receive rentals, royalties, etc.

The suggestion has been made by attorneys whose principal work is in connection with leases that the attempt might well be made to extend such provision to include matters other than the distribution of moneys. It might be made a matter of lease contract that where more than some reasonable number, such as four or five, are owners of the oil and gas rights, they be required to name an agent to transact all business affecting the lease. Thus, in the event the operator desired to renew the lease, it would be necessary to see only one person, who would be empowered to make the decision. Much time, energy and money not spent in trying to find the numerous owners of royalty would be saved.

Opinion is that such provision could legally be made, but, says one, "could you get anybody to sign it?" It would at least be worth trying.

Seal Beach Passes 70,000 Barrels As Deep Sand Area is Extended

LOS ANGELES, June 11

DEEPER penetration of the oil sand in the Alamitos Heights area of Seal Beach, daily average production of more than 70,000 barrels during the past week in this field, completion of many wells with high flush production, extension to include about six city blocks the area where deeper penetration is possible at Alamitos Heights and finding of a thin oil sand by the General Petroleum Corp. slightly below 5000 feet on the Wassem tract are the highlights in production circles in California the last week.

These developments, with slight increase in one or two other fields, caused a jump of close to 20,000 barrels, daily average, in California production this week.

Fully 30 wells were nearing the oil sand in the big flush area of Seal Beach as the week ended and most of these wells should be completed within the next seven days.

Sixteen wells were completed this week at Seal Beach and adding production secured by several recompletions, the total flush production was at least 25,000 barrels. New production may have exceeded that volume because Marland and Pan-American are withholding complete information about their Alamitos Heights wells.

Early in the history of the Alamitos Heights town lot area, the sand penetration averaged around 70 feet. But recent completions on top of the structure, an area now estimated as covering about six city blocks, are penetrating 150 to 250 feet of pay formation, with heavy gas pressure. Richfield Oil Co. completed a well within this area for close to 3,500 barrels of clean oil with about 270 feet of sand penetration. George Getty completed two wells with sand penetrations of 235 and 250 feet, respectively, each well making more than 2,000 barrels of good oil. The California Eastern Oil Corp. completed a 90-barrel-an-hour well and 12 other California Eastern wells were drilling, most of them in the sand Friday.

The consensus of opinion is that about the last of June the gas head will be off the wells in the Alamitos Heights area and that production will decline rapidly. So if there is no deeper prolific sand uncovered, the Seal Beach high production will be short lived, and heavy in decline, when it does start.

Date of Rate Increase Again Postponed

WASHINGTON, June 13.—Postponement this week, by the Interstate commerce commission, of the effective date of its order in the Midcontinent Oil Rates, 1925 case, from June 20 to August 20 in so far as rates to St. Louis and points east of the Mississippi are concerned, and until July 20 in so far as rates northward from the midcontinent groups are concerned, has two meanings.

The first is that the rate body wants to give itself a little more than two months to consider the matter of the relationship of rates from groups 2 and 3 to St. Louis and the east. The second is that the reductions in rates from group 2 to the north, in particular, will stand, regardless of what happens to the rates from those groups to the east.

All the rates were to have become effective June 20. The railroads, when the postponement was announced, had filed the tariffs to make the changes ordered. When the commission decided to take two months for considering the relationship question about which Groups 2 and 3 fought a three-day fight at the beginning of the month, it realized that it would take the railroads a month to prepare tariffs that would put into effect the reductions from group 2 and Kansas City northward, hence it was necessary to give them another month. C. R. Seal, examiner for the Commission, who has had charge of the case, has advised the railroads and the shippers that they may properly infer, from the commission's order of postponement that the rates to the north will go into effect on July 20.

Arkansas Test Indicates Possible New Field

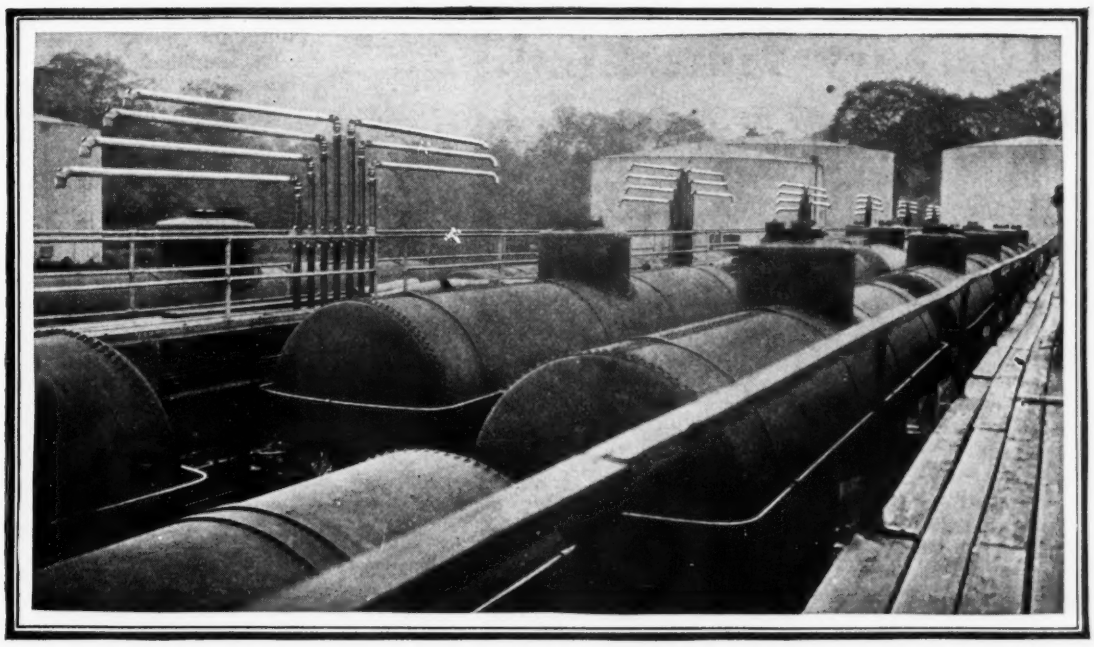
HOUSTON, June 9.—A test 12 miles southeast of the Smackover, Ark., field, in 4-17-14, Union county, is getting attention more for the possibilities it opens than because of present importance of the individual well. The test, drilled by Rovenger Oil Corp., on the McCain farm, has been making oil and water at total depth of 2828 feet. The oil tests 28.1 A.P.I. gravity.

After exhausting more than 2000 feet of water standing with oil in the hole, the production cleared up. The well is rated variously as good for 10 to 30 barrels daily.

Rovenger interests have about 2000 acres around the well and Ohio Oil Co. has about 4000 acres adjoining the Rovenger block on the east.

New Amarillo Refinery

TULSA, June 13.—Dorset Corter, president of the Pantex Pipe Line Co. is organizing a new company to be known as the Texarrillo Refining Co. It is planned to erect a 5,000-barrel refinery at Amarillo to run Panhandle crude.



These Close-Fitting, Easy-Swinging Joints Save Leaks and Strains in the Pipe Line

Single Swing Joint
Sizes 2, 2½, 3 and 4-inch

WHEATON Swing Joints are a fine example of how Wheaton builds *quality* into a piece of equipment in which quality is ordinarily given small consideration. They are made of the same special-analysis brass alloy—tempered, toughened and tested—found in Wheaton Faucets, Valves, Couplings, Nozzles, Fillers, etc.

This high quality material, which neither crystallizes nor corrodes, assures a durability seldom found in swing joints. And with the fit and finish, characteristic of Wheaton workmanship, added to this extraordinary quality of material, smooth close fit and easy action are made *lasting*. Dangers of leaks are minimized.

Save trouble and save money by standardizing on Wheaton Swing Joints. They will continue their "service of satisfaction" long after the ordinary joint has been buried in the junk heap. Send for a sample today. If not entirely satisfactory, you may return it for full credit or refund. Also request copy of the Wheaton Catalog which describes and illustrates other Wheaton Products.

Double Swing Joint
Sizes 2, 2½, 3 and 4-inch

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Pump Makers Oppose Gasoline Delivery Time Limit

By Roger B. Stafford

N. P. N. STAFF WRITER

CLEVELAND, June 14. OPPOSITION to the 10-second time limit for the completion of gasoline deliveries from visible pumps of the sliding discharge tube type, is expected to be undertaken by pump manufacturers on the ground that so short a limit is impractical.

The 10-second limitation was tentatively adopted by the Twentieth National Conference on Weights and Measures at the Bureau of Standards in Washington two weeks ago. A committee was appointed to receive suggestions and criticisms and to it the manufacturers will present their ideas and complaints.

Three new specifications governing gasoline dispensing equipment were adopted. One, No. 5-a, provides for a device to indicate when the pump system is properly filled; another, No. 21-a, provides for a sight glass on certain types of pumps, and the third, No. 21-b, set the time limit for the completion of delivery after the main flow has ceased. Specifications are tentative and are not to be effective before July 1, 1928. Nos. 21-a and 21-b follow:

"No. 21-a—Auxiliary visible indicating devices. Whenever a liquid-measuring device of the visible type is so designed and constructed that measured liquid continues to pass through the discharge valve for an appreciable time (3 seconds or more) after the liquid has disappeared from sight in the glass measuring chamber, then the device shall be equipped with an auxiliary visible indicating device, adjacent to the discharge valve and so constructed that it will indicate when any portion of the measured liquid has not been discharged through such valve at the time of the closing thereof; Provided, however, that in the case of any nominal delivery which is such that it does not cause the liquid to disappear from the chamber, the time interval mentioned above shall be measured from the time that the liquid apparently ceases to fall in such chamber.

"Such auxiliary visible indicating device shall be so designed and constructed and so located and disposed that its indication is conspicuous and that, during the operation of the liquid-measuring device, it is clearly visible to and readable by the customer.

"Whenever an auxiliary visible indicating device designed to indicate drainage of liquid and/or completeness of delivery shall be employed, whether or not it is required by the terms of this specification, it shall comply with all the above requirements."

"No. 21-b—Time allowed for completion of delivery. All liquid-measuring devices shall be so designed and constructed, or so calibrated, that they will deliver into the hose, within the tolerances for devices in use, any nominal quantity which they are designed to deliver, within a period of 10 seconds after the main flow of liquid has ceased.

"The main flow shall be construed to cease: In the case of a device of the piston type at the completion of the upward stroke of the piston; and in the case of a device of the visible type, at the time of the disappearance of the liquid in the glass measuring chamber: Provided, however, That in the case of any nominal delivery which is such that it does not cause the liquid to disappear from the chamber, the time that the liquid apparently ceases to fall in such chamber shall be used in lieu of the time of the disappearance of the liquid; and provided further, that in the case of any liquid measuring device equipped with an auxiliary visible indicating such as is described in Specification No. 21-a, any conspicuous change of indication in this device, such as a sudden drop in the level of the liquid, occurring after the major portion of the delivery has been completed, shall be used in lieu of either of the indications mentioned above.

"ALL tests and calibrations shall be made on the basis outlined above, that is, the delivery valve shall be closed, or the operation of the liquid-measuring device otherwise discontinued, at the termination of the period of time mentioned above and the amount which shall then have been delivered shall be taken as the full delivery of the device for the nominal quantity being delivered.

"Eight of the largest nine makers of visible gasoline pumps manufacture the sliding discharge tube type, said one manufacturer who follows closely weights and measures regulations throughout the United States. The main flow in these eight makes of pumps, he explained, comprises about 9 2/3 gallons of a 10-gallon delivery. This quantity is delivered in about 30 seconds. Completion of the delivery, or the delivery of the remaining one third gallon, requires up to two minutes, he said because of the absence of a sufficient head on the remaining liquid and friction in the pump and hose.

The simplest way of meeting the time limit, he said, would be to overcalibrate pumps of this type but no oil company would buy an overcalibrated pump because it would give a dishonest operator a chance to excuse his outages. A pump would have to be overcalibrated 20 to 30 inches, he said, which was too wide a leeway to give an operator who might not be entirely honest."

DIFFICULTY with the gasoline buying public might also arise because even though 10 gallons were delivered, the sight glass in the discharge line, as required in some states, would not show that the system had been emptied.

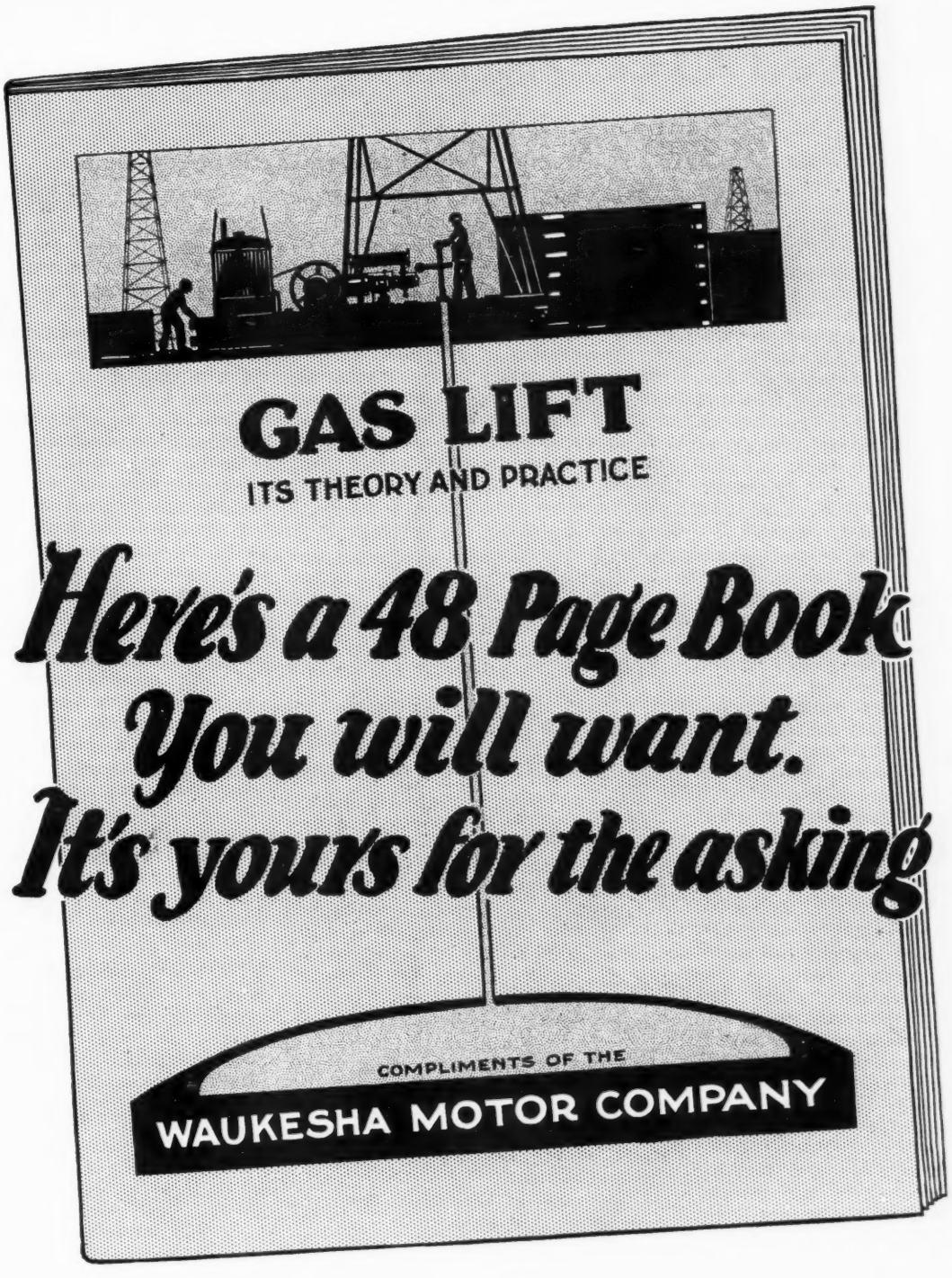
This manufacturer when asked to estimate the number of sliding discharge tube pumps in service, said he "would gamble there were 50,000." Seven manufacturers have been making the type for about three years and the eighth began making the type in the last year.

While the specifications adopted by the national conference are now national regulations, they are taken as guides by state weights and measures departments for the drafting of state regulations. The national conference does not favor making the time limit retroactive to affect present pump installations but there is nothing to prevent state sealers from making the provision retroactive in their respective states.

The manufacturers, he said, will endeavor to have revisions made before the specifications are adopted by the next national conference probably in May 1928. The committee that will receive suggestions, consists of F. S. Holbrook, Bureau of Standards, Washington, chairman; W. F. Cluett, chief deputy inspector of weights and measures of Chicago; Charles M. Fuller, city and county sealer of weights and measures of Los Angeles; A. W. Schwartz, assistant superintendent of weights and measures of Elizabeth, N. J., and I. L. Miller, state commissioner of weights and measures of Indiana.

Specification 5-a which will not be finally acted on until the next national conference, follows:

"Device to indicate when system is properly filled. All liquid-measuring devices other than those of the visible type, shall be equipped with a device which will indicate whether or not the system is properly filled before a delivery is begun. This specification shall be construed to prohibit a check valve in the discharge line in such a position that the partial emptying of the system would not be disclosed, but not to prohibit a manually-operated valve in the standpipe."



P-740-L *OIL INDUSTRY EQUIPMENT DIVISION*

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Exclusive Builders Heavy of Duty Gasoline Engines for Over Twenty Years

Saving and Re-Utilization of All Gas Proposed Over-Production Remedy

By T. Edgar Pew

Vice-president Sun Oil Co., Dallas, Former President American Petroleum Institute

Published Exclusively in National Petroleum News

THERE have been many suggestions as to a remedy for the present overproduction of crude petroleum. I cannot believe that anything will be accomplished by so-called agreements, either to curtail production or to shut down drilling. If it were possible to reach either of these results it would be only a temporary cure, and the menace of the present situation would still be with us as the "bottled up" present production could only be restrained for a short period of time.

Any revision of the Sherman Anti-Trust Law in favor of the oil industry is altogether unlikely, or, if such revision were made, we would still have our state anti-trust laws to revise, *again in favor of the oil interests, another unlikely procedure.*

If these obstacles were all done away with we would then have the human element to contend with, the impossibility of getting leaseholders, plus the landowners, to agree on a method of operations that each would be satisfied with. The attorneys advise us that this could not be done by compulsion.

I DO NOT believe any "*unit ownership*" could be accomplished equitably on any acreage basis, as the productive character of any two leases, even in the same field, will vary, in many cases as much as 100 per cent. There is no way of determining the relative value of leases until all the wells have been drilled, and frequently for a long period thereafter.

If the lessees could get together and the result should be the restraining of development, the lessors might have a very serious case for complaint, and the evidence of such agreements to restrain development might, and probably would, be the only evidence the lessors required to procure a cancellation of valuable leases. Very few operators would take such chances in the face of some of our recent court decisions on this point.

I believe there is a permanent solution that will largely avoid these periods of overproduction of oil, and one that will stabilize conditions of production for the future so that the law of supply and demand will obtain, but in a regular, dependable manner, and without these ruinous and unsatisfactory wide fluctuations with which the industry is now afflicted; and that if this had been applied during any period of great flush production since and including the Cushing field, and we had had the knowledge of better production methods and the results of the conservation of gas that we now possess, we would have avoided all the high peak periods of production for the past thirteen years. *This lies in the saving of, and re-utilization of, all gas* incident to the production of oil.

WE HAVE on the statute books of our various states conservation laws which if rigorously enforced would accomplish this. If these laws are not enforcible, and if they are not sufficient to force a complete conservation and a proper re-use of gas, the oil industry should fully co-operate with the state authorities in securing such amendments to the laws as would accomplish this result.

If, as we are advised by both competent petroleum engineers and by companies which have carried on extensive experiments, more oil will be recovered from the sands by holding pressure on them, and by the recirculation of gas through the sands, both of these practices should be compulsory as a matter of conservation, and the results should be profitable to the producer from the greater recovery of oil, and from the cheaper lifting costs on account of the greater amount of oil that would be lifted by the gas.

A still greater benefit, both to the public and to the entire oil industry, would be the stabilizing of oil producing conditions.

High peaks of production from the rapid drilling of flush pools result in temporary low prices for crude oil, in greater costs of production on account of the rush periods of operations, and in wasteful uses of oil products.

THE COUNTRY is surely interested in an even, dependable production of oil, over a long period of time, and in getting from the oil the best results in the uses for which it is best adapted and most needed. It is interested in obtaining as nearly as possible 100 per cent of the value of the products out of oil in its manufacture.

If, as a result of "overproduction" periods, in order to move the oil required we have to resort to uneconomical practices, such as leaving uncracked large quantities of our products, or in any other manner resort to practices that make less gasoline, then this is poor economy both from the viewpoint of the public and of the industry.

While there is probably no law that could be enacted, either federal or state, that would compel a landowner, or a leaseholder, to join in a community operation that would make the owner of the land or the lessee share equally with his neighbors in the oil produced from any given area, the enforcement of the laws of gas and oil conservation, both to the end that gas cannot be wasted, and that the fullest recovery of oil shall be had, will accomplish all the results and benefits of a unit operation, and without interfering with the rights of each holder to get his proper proportion of the oil and gas from under any given tract owned by him. The fact that all lessees would be subjected to this same rule would compel them to get together on some economical and practical plan of operations to meet the requirements of these conservation measures.

IF THIS conservation were insisted upon it would retard the development of new flush fields that the menace of their production would never affect the general situation by causing any sudden high peaks in production. Applying this to the Powell, Mexia, Wortham, Cromwell and Cushing fields, and to Santa Fe Springs and Signal Hill in California, or to most of our large flush fields of the past, none of these would have had either the rapid or extensive drilling which was indulged in so ruinously, not only to these fields but to the entire oil producing industry. They could not have taken care of the gas resulting from a rapid drilling campaign. Powell would have still been drilling and oil would still have been producing under gas pressure.

It would have cut out very largely the small lot drilling, and would have resulted in all tracts producing more nearly the amount of oil they were entitled to produce. At Powell, probably millions of dollars would have been saved, which were spent as a result of the temporary rush development conditions.

TO MANUFACTURERS AND MARKETERS OF NON-CHATTER FORD OILS

There are two ways to make an oil adapted for planetary transmissions. One of these is to dope the lubricating oil with animal oil or animal oil acids—the result an oil that must be added constantly to the crank case or the "chatter" returns. The other way (the better and cheaper way) is to use an oil made under the Sorenson patent (No. 1,414,311).

Some of the largest oil companies in the United States have taken out a license to use the process of this patent. Others will be allowed to secure a license or take the consequences of their infringement. WARCO F Base is the *original* patented Ford oil Base that is used in the ratio of 5% of Base to 95% of lubricating oil. This percentage carries into the finished product enough of the chatterless element to not only take the "chatter" out but to keep it out as long as there is oil in the crank case.

Here's the "sleeper". Some Base manufacturers will sell you a Base and tell you in a *whisper that you can "cut" it down 50%*. Sure you can, and you may get by with it but you won't build up any trade, because the chatter will come back and your customer won't.

The Sorenson patent No. 1,414,311 must be placed on all packages carrying our license, and our purpose is to protect the quality of the oil that goes out under that Patent Number. Some day Ford owners are going to demand that patent number on their oil packages.

All Rights, Authority and Privileges to issue licenses are Reserved and controlled by

THE WARREN REFINING & CHEMICAL COMPANY

Sole Owners of

SORENSON PATENT No. 1,414,311

Meech Ave. Cleveland, Ohio

The Warren Refining & Chemical Co., Cleveland, Ohio

Please send sample of your Warco F Base and quote lowest price in ..... drum lots delivered to

Name .....

Town .....

State .....

The average production—the great number of small, old wells upon which we are dependent for any satisfactory stability of oil production throughout the country, those owned by both large and small operators—would be able to operate with some degree of assurance of a stable, regular market condition from year to year if these peaks were cut out, and were merged into regular curves of production.

The demand for oil products has been steadily increasing, and will continue to increase. The character of these demands does and will continue to depend upon a stable supply. Great fluctuations of supply permit the building up in peak times of markets for cheap products, which markets can be cut off suddenly when the supply gets short. It would be much more profitable to the oil industry, and much sounder economics for the public, if the supply could be stabilized and made dependable at all times. It would permit the building up of a demand for better uses of oil products, such as house heating, etc., which uses can only be developed under stabilized conditions of supply.

The effect of extreme gas conservation should work for the benefit of all operators and producers, most of whom desire to practice the best measures of production and conservation but are unable to do so because some others will not.

The oil industry could well afford to engage the services of a committee of the best engineers in the industry to report to the industry the results to be obtained from a complete conservation of gas, and the advantages of the re-use of gas through the sands for the greater recovery of oil. I hope to see the American Petroleum Institute take this up and employ these engineers to make such a report as a proper activity of its responsibility to the industry. I believe this should be done at once.

WE ARE in a new era in the production of oil. With the greater geological information and the new geophysical methods being employed for the finding of oil, new fields are being developed with a degree of certainty and rapidity never before experienced in the oil finding industry. It would seem now that unless an effective curb is put on the development of these new fields, our markets for the next several years will be made by flush pools. If this is true old settled production cannot continue to be operated, and great losses will be the result both to the public and to the oil industry.

We need these new pools, but we need a complete conservation program in their development. Beyond this in the operating of our business in a completely economical manner, the law of supply and demand should apply to the oil industry as to any other. It should be made to apply so that the public will be assured of its requirements of our products for the longest period. There is plenty of oil and plenty of substitutes, when and if oil fails, and for all the generations to follow for which we have any reasonable responsibility, but the public both now and in the future has a right to these products at prices which will be the result of the best practices on the part of an efficiently operated industry. It should claim no more and should be satisfied when we have met our obligations squarely.

Parker Succeeds Bell As Chief Supervisor

Staff Special

HOUSTON, June 9.—R. D. Parker, previously head of the gas utilities division, has been named chief oil and gas supervisor of the Railroad Commission of Texas, which administers the state's conservation laws. Parker succeeds Judge H. E. Bell, who resigned last week after a tilt with Commissioners C. V. Terrell and Lon A. Smith over the qualifications provision of Bell's redraft of the Texas conservation bill, then pending before an extra session of the legislature.

Parker, who is an engineer by training, has been connected with the railroad commission in one capacity or another since 1909. He was appointed head of the gas utilities division in 1920. His new duties will be assumed June 23, at which time Judge Bell will end a vacation period to which he was entitled before his resignation became effective.

The Bell bill, which had been shorn of its civil service feature in the house committee and from which Governor Dan M. Moody had already cut a provision permitting pooling agreements in the interest of conservation, did not come to a vote before the extra session was adjourned, June 7.

White Oak Refinery Opens

TULSA, June 13.—The White Oak Refining Co. recently organized by W. M. Welch and associates, will begin running its refinery at Allen, Okla., about June 15. The pipe line from the plant to the Seminole field is nearing completion and the refinery has been overhauled and improved by the addition of new towers. The plant has a capacity of around 2,000 barrels per day.

BLOOMFIELD, Ia.—Three service stations and bulk storage for 45,000 gallons have been completed here by the Hall Oil Co., of which H. A. Wishard and his son-in-law, F. E. Hall, are owners and operators.

Empire's Okmulgee Plant Damaged by Fire

Staff Special

TULSA, June 10.—Delegates to the Oklahoma state firemen's convention at Okmulgee on June 9, were given an unexpected demonstration of methods of fighting an oil fire when the crude battery at the plant of the Empire Refineries Inc., was damaged by a spectacular blaze. The fire played to a large audience of visiting firemen for several hours.

Two crude stills out of the battery of six were destroyed and settings of the four others were badly damaged. Company and city firemen succeeded in keeping the blaze localized at the crude battery. The amount of damage has not been ascertained as yet but a hasty survey indicates that it will require about two months to rebuild.

The exact cause of the fire has not been ascertained. It is thought that it resulted from a broken vapor or hot oil line. When the fire was first observed one still was enveloped by a mass of flames. No one was injured.

The Empire plant at Okmulgee is a 3,000 barrel complete refinery making a number of special products such as transformer oils in addition to lubricants and wax. The company will run up its present stocks of wax distillates and may be able to buy more of this material from adjacent refineries to keep the lube plant busy until the crude battery can be put back in service. The cracking plant also will not be shut down unless that becomes necessary.

National Refining Buys Coryell Stations

LINCOLN, Neb., June 10.—National Refining Co., Cleveland, O., has purchased three filling stations in Lincoln, Neb., for a reported $30,000 from the Coryell Oil Co., which thereafter dissolved. The principals in the Coryell Oil Co., however, are continuing in the oil business in Lincoln.

George Coryell, who founded the business, continues to operate the bulk plant at 14th and W. Sts. He will market fuels exclusively through tank wagons in the future, according to plans. He already has a large distribution in industrial and domestic fuel oils and an established coal business.

Earl Coryell, son of George Coryell and formerly manager of the company, is building a super service station at 14th and N Sts. in the heart of the down town district. Parking stalls for rent to men who drive to business, is one of the features the younger Coryell is incorporating in his establishment.

The present rate of crude oil production is in excess of 900,000,000 barrels per year

500,000,000 barrels of crude oil brought out of the ground in the next 12 months would be ample to produce all the gasoline and all the lubricating oil required for our needs

This amount of crude can easily be made to produce in excess of 350,000,000 barrels of good gasoline—more than our present requirements

Figuring 135,000,000 barrels of gasoline from skimming operations, the remaining 215,000,000 barrels of better gasoline can easily be produced from the remaining skimmed crude by The Cracking Process

This is true conservation This is the efficient yield toward which every effort should be directed

Universal Oil Products Company
Owner of the Dubbs Process
310 South Michigan Ave
Chicago, Illinois

Compilation Of Mid-Continent Refinery Operations

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National Petroleum News

Mid-Continent Refinery Operations Week Ended June 10 (By Telegraph)

	Kansas	Oklahoma	North & Cent. Texas	North La.-Ark.	Total Week Ended June 10	Total Week Ended May 13
Plants Reporting	23	46	41	14	124	124
Crude Capacity (bbls.)	106,200	165,900	144,300	53,700	470,100	462,100
Cracking Capacity	29,000	45,800	15,750	20,200	110,750	102,750
Da. Av. Crude Runs	56,449 + 14.2	108,434 + 11.4	67,555 + 1.8	46,154 + 6.8	278,592 + 8.7	283,041
Da. Av. Other Oils	2,893 — 36.4	1,602 + 19.6	4,437 — 8.1	530 — 57.9	9,462 — 21.0	16,848
GASOLINE—Gallons						
Stocks, June 3	14,902,000	51,977,000	18,677,000	4,281,000	89,837,000	98,971,000
Prod. 6-3 to 6-10	7,768,000 + 4.6	16,912,000 + 32.7	7,879,000 + 7.3	3,437,000 + 7.9	35,996,000 + 17.3	36,976,000
Ship. 6-3 to 6-10	8,717,000 + 13.6	18,117,000 + 3.2	7,119,000 — 3.8	3,820,000 + 10.3	37,773,000 + 4.7	38,583,000
Stocks June 10	13,953,000 — 6.4	50,772,000 — 2.3	19,437,000 + 4.1	3,898,000 — 8.9	88,060,000 — 2.0	97,364,000
Ratio Sales to Prod.	112.2%	107.1%	90.4%	111.1%	104.9%	104.3%
KEROSENE—Gallons						
Stocks, June 3	3,091,000	5,815,000	2,521,000	907,000	12,334,000	13,459,000
Prod. 6-3 to 6-10	1,807,000 + 2.8	2,654,000 + 7.9	1,362,000 — 21.6	403,000 — 7.4	6,226,000 — 2.6	6,571,000
Ship. 6-3 to 6-10	1,539,000 + 41.6	2,364,000 — 45.7	1,707,000 + 28.5	462,000 — 2.9	6,072,000 — 16.2	7,311,000
Stocks, June 10	3,359,000 + 8.7	6,105,000 + 5.0	2,176,000 — 13.7	848,000 — 6.5	12,488,000 + 1.2	12,719,000
Ratio Sales to Prod.	85.2%	89.1%	125.3%	114.6%	97.5%	111.3%
STOVE DISTILLATE—Gallons						
Stocks, June 3	2,784,000	2,367,000	787,000	24,000	5,962,000	5,959,000
Prod. 6-3 to 6-10	234,000 + 12.5	402,000 +133.7	303,000 + 1.0	41,000 — 24.1	980,000 + 33.5	817,000
Ship. 6-3 to 6-10	90,000 + 9.8	570,000 + 86.3	264,000 — 12.9	28,000 — 55.6	952,000 + 26.3	901,000
Stocks, June 10	2,928,000 + 5.2	2,199,000 — 7.1	826,000 + 5.0	36,000 + 54.2	5,990,000 + 0.5	5,875,000
Ratio Sales to Prod.	38.5%	141.8%	87.1%	68.3%	97.1%	110.3%
GAS OIL—Gallons						
Stocks, June 3	5,325,000	41,565,000	12,201,000	7,384,000	66,475,000	64,067,000
Prod. 6-3 to 6-10	1,478,000 + 1.2	2,732,000 — 21.2	1,311,000 — 43.3	2,017,000 + 19.7	7,538,000 — 15.6	7,718,000
Ship. 6-3 to 6-10	1,206,000 — 2.0	1,878,000 — 52.9	1,274,000 — 33.0	1,060,000 + 5.5	5,418,000 — 33.3	6,011,000
Stocks, June 10	5,597,000 + 5.1	42,419,000 + 2.1	12,238,000 + 0.3	8,341,000 + 13.0	68,595,000 + 3.2	65,774,000
Ratio Sales to Prod.	81.6%	68.7%	97.2%	52.6%	71.9%	77.9%
FUEL OIL—Gallons						
Stocks, June 3	11,341,000	33,469,000	22,883,000	10,943,000	78,636,000	82,675,000
Prod. 6-3 to 6-10	6,333,000 + 19.6	6,660,000 + 39.7	9,131,000 + 2.4	7,236,000 + 3.7	29,360,000 + 13.1	30,279,000
Ship. 6-3 to 6-10	7,182,000 + 17.8	7,164,000 + 43.1	8,929,000 + 5.1	5,212,000 — 14.0	28,487,000 + 11.0	28,663,000
Stocks, June 10	10,492,000 — 7.5	32,965,000 — 1.5	23,085,000 + 0.9	12,967,000 + 18.5	79,509,000 + 1.1	84,281,000
Ratio Sales to Prod.	113.4%	107.6%	97.8%	72.0%	97.1%	94.7%

Gasoline Produced by Various Methods, Week Ended June 10

	Kansas	% of Total	Oklahoma	% of Total	Texas	% of Total	Louisiana-Arkansas	% of Total	Total	% of Total
Straight Run	5,570,000	71.7	12,760,000	75.5	6,535,000	83.0	902,000	26.2	25,767,000	71.6
Cracked	1,784,000	23.0	2,778,000	16.4	1,152,000	14.6	2,149,000	62.5	7,863,000	21.8
Natural	414,000	5.3	1,374,000	8.1	192,000	2.4	386,000	11.3	2,366,000	6.6
Total	7,768,000		16,912,000		7,879,000		3,437,000		35,996,000	

+ or — columns are % change over previous week.

Mid-Continent Refiners Speed Operating Rate

Staff Special—By Telegraph
TULSA, June 14.

CRUDE runs in every area of Mid-Continent were increased in week ended June 10, according to operating reports to National Petroleum News from 124 plants. Daily average crude charges totaled 278,592 barrels, an increase of 22,200 barrels as compared with a decrease of 19,600 barrels daily average in the week ended June 3. A year ago crude runs averaged 290,000 barrels daily.

Kansas refiners increased crude charges approximately 7,000 barrels daily average, Oklahoma refiners 11,000 barrels, Texas refiners 1,000 barrels, and Arkansas-Louisiana refiners 2,000 barrels.

Charges of other oils were reduced 2,500 barrels daily average. Most of the reduction was in Kansas and Louisiana-Arkansas area.

Increase in crude runs pushed gaso-

Summary for the Month

Production and shipments, all reporting refineries, for four weeks ended June 10. Change in stocks figured from May 13.

Gasoline

	Gallons
Production	139,581,000
Shipments	148,885,000
Net change in stocks	—9,304,000
Ratio sales to production	106.7%

Kerosene

Production	26,009,000
Shipments	26,240,000
Net change in stocks	—231,000
Ratio sales to production	100.9%

Stove Distillate

Production	3,673,000
Shipments	3,558,000
Net change in stocks	+115,000
Ratio sales to production	96.9%

Gas Oil

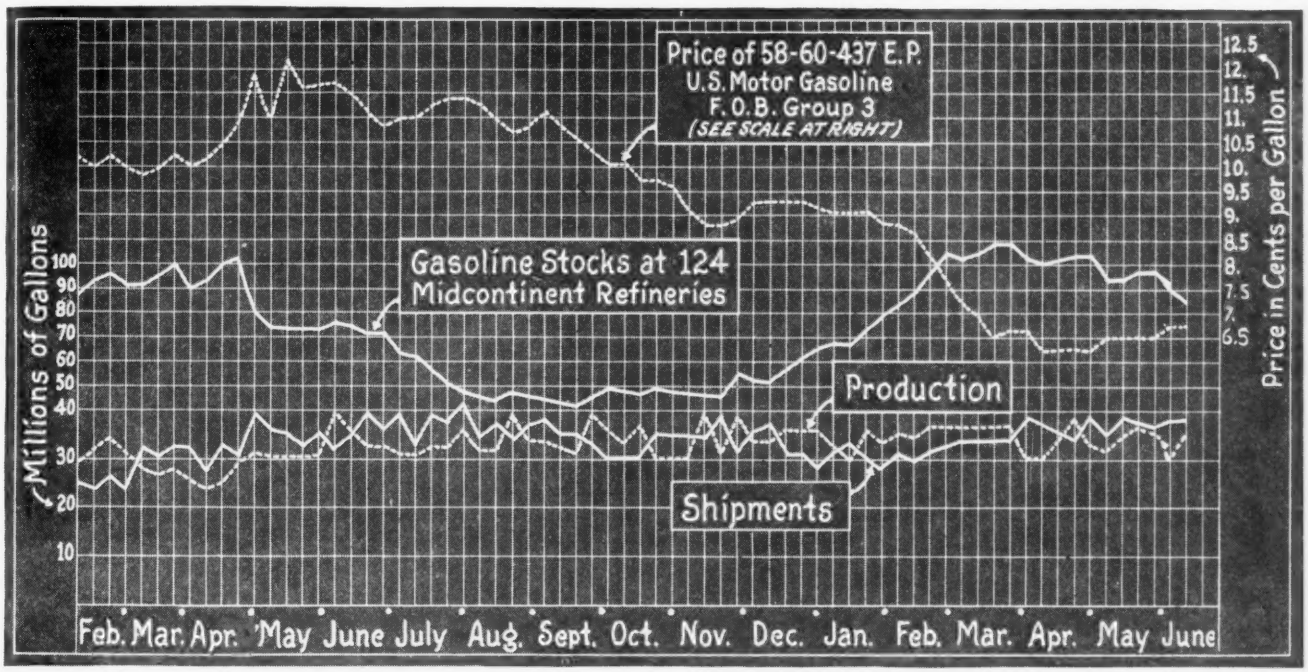
Production	30,516,000
Shipments	27,695,000
Net change in stocks	+2,821,000
Ratio sales to production	90.8%

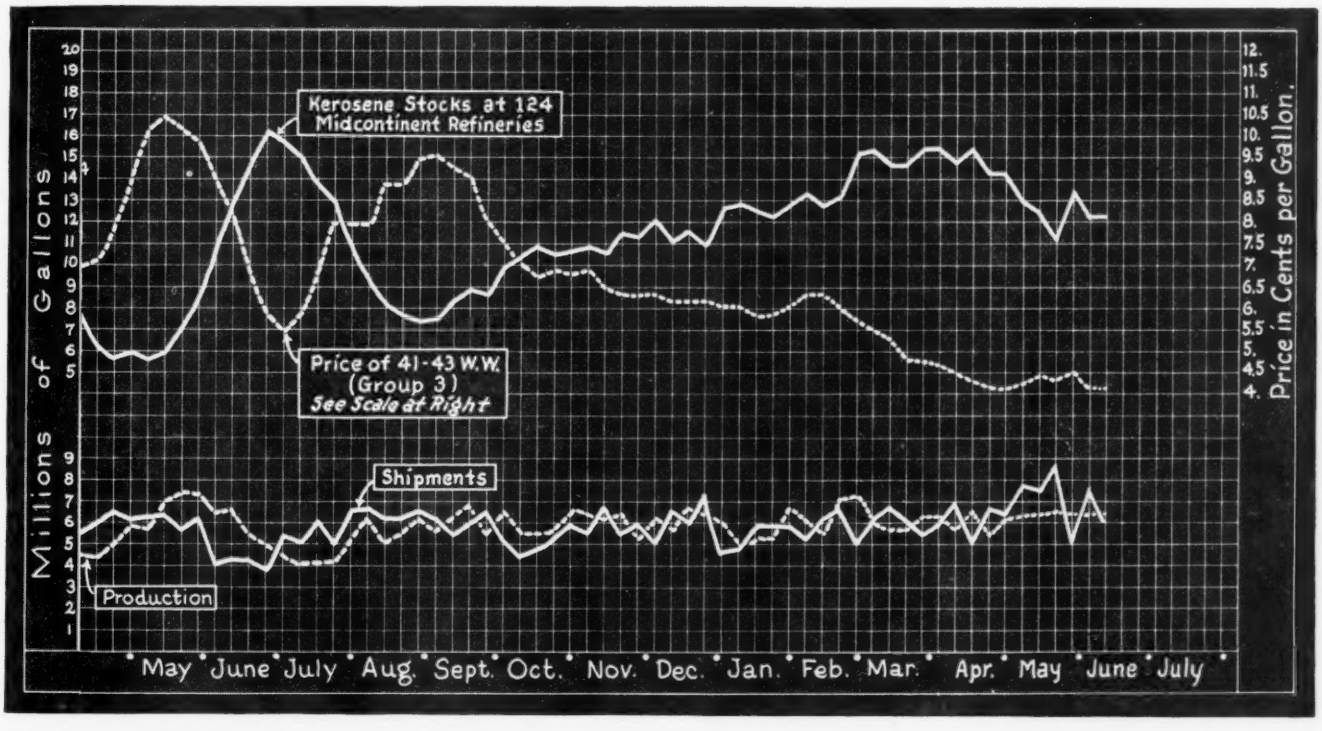
Fuel Oil

Production	113,765,000
Shipments	118,537,000
Net change in stocks	—4,772,000
Ratio sales to production	104.2%

Barometer of Mid-Continent Refinery Market—Week Ending June 10

Charted Course of Prices, Production, Shipments, Stocks of Principal Refined Products, Week by Week, From Reports Made by 124 Plants to National Petroleum News


Price of 58-60-437 E.P.
U.S. Motor Gasoline
F.O.B. Group 3
(SEE SCALE AT RIGHT)
Gasoline Stocks at 124
Midcontinent Refineries
Production
Shipments
Millions of Gallons
Price in Cents per Gallon
Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June


Kerosene Stocks at 124
Midcontinent Refineries
Price of 41-43 W.W.
(Group 3)
See Scale at Right
Shipments
Production
Millions of Gallons
Price in Cents per Gallon.
May June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June July

line production to 35,996,000 gallons, compared with 30,697,000 gallons in the week ended June 3. Gasoline shipments increased 1,600,000 gallons, resulting in stock reduction of 1,700,000 gallons. Each area with the exception of Texas drew on stocks. Texas refiners added 700,000 gallons to stocks.

Gasoline production was virtually the same as a year ago but shipments were about 3,000,000 gallons more this year. Reporting refiners in the corresponding week of 1926 ran 1,200,000 gallons to storage.

Kerosene production was 2.6 per cent less than in week ended June 3 while shipments were 16.2 per cent, less causing an addition of 150,000 gallons to stocks. Texas and Louisiana-Arkansas refiners drew on stocks, but Kansas and Oklahoma refiners increased stocks.

Stove distillate stocks in Oklahoma were reduced 160,000 gallons although production increased 133.7 per cent and shipments increased 86.3 per cent. Stocks were increased in all other areas.

Gas oil production was reduced 15.6 per cent. Shipments were off 33.3 per cent causing an increase of 3.2 per cent in stocks. Both production and shipments of fuel oil were increased, the former 13.1 per cent and the latter 11 per cent. Production was 29,360,000 gallons and shipments 28,487,000 gallons.

4

The Four Main Essentials of An Efficient Metal Sign

1 *Distinctive layout*—without which a sign is commonplace and "lost in the crowd."

2 *Outstanding colors and color contrasts*—without which a sign defeats its own purpose and fails to gain very much attention.

3 *Durable mechanical construction*—without which a sign soon becomes unsightly and loses all merchandising value.

4 *Cost*—low enough per sign to permit generous use of the sign, otherwise thorough coverage of territory becomes prohibitive.

We claim, and Robertson sales records prove, that

ROBERTSON
Metal Signs

invariably possess these four essentials of a good sign. We need only to cite scores of outstanding products advertised on them, and direct attention to the remarkable repeat order record Robertson signs have to their credit.

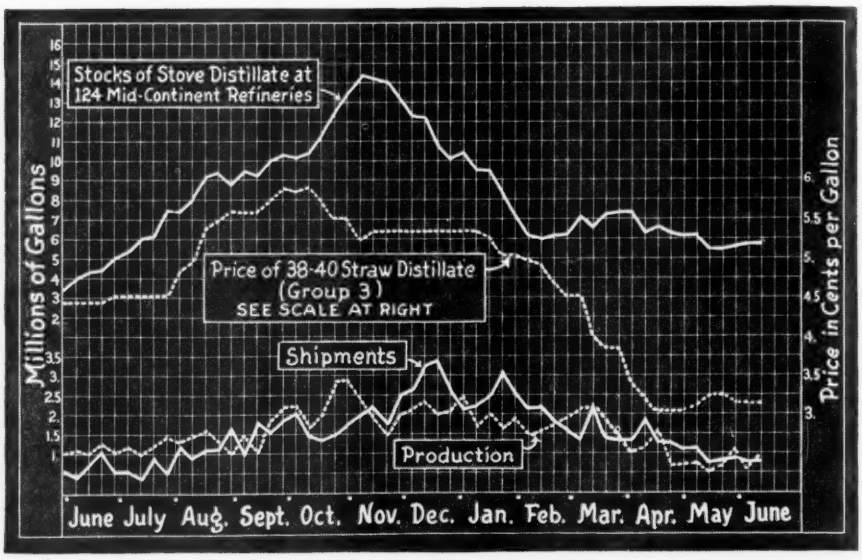
Get samples and make any comparative investigations you deem advisable. Also let us quote you.

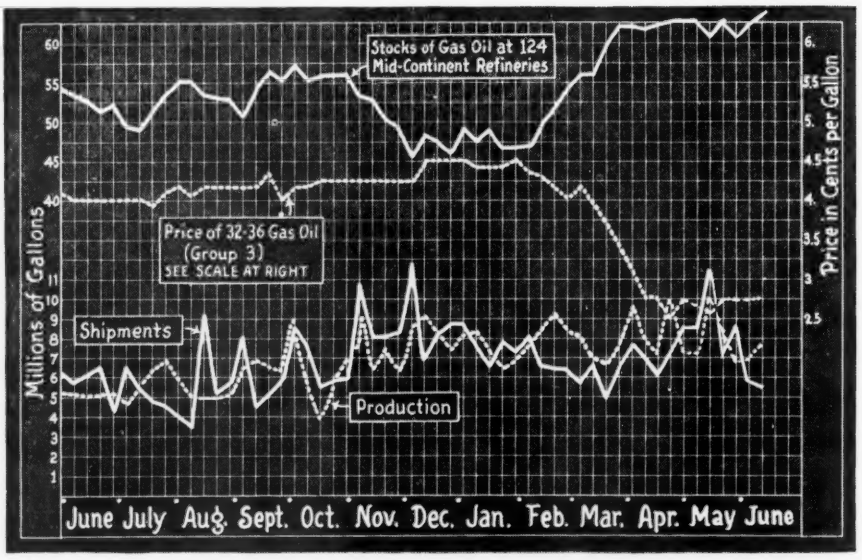
The W. F. Robertson Steel & Iron Co.
The Elwood-Myers Co. Div.
Springfield, Ohio

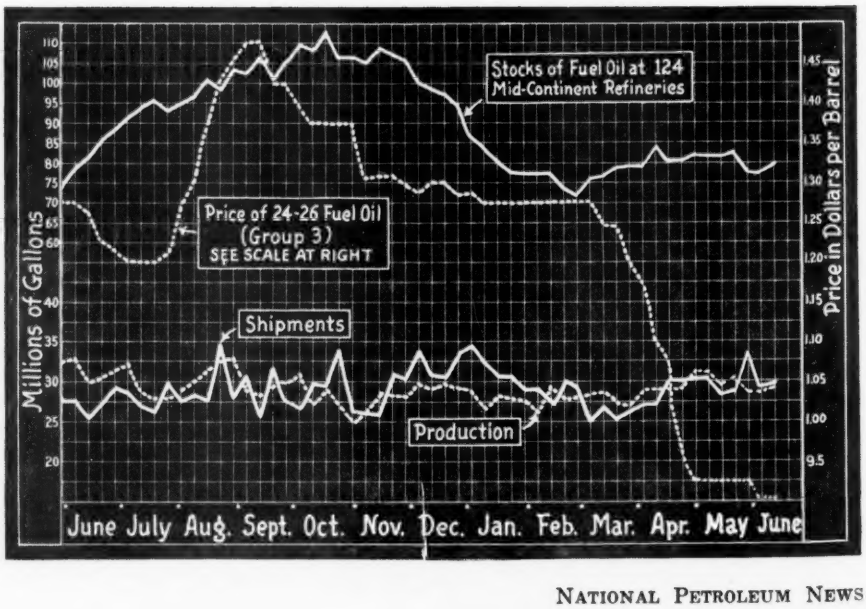
Let us Quote on Your Requirements

Barometer of the Mid-Continent Refinery Market

Week ending June 10


Stocks of Stove Distillate at 124 Mid-Continent Refineries
Price of 38-40 Straw Distillate (Group 3) SEE SCALE AT RIGHT
Shipments
Production
Millions of Gallons
Price in Cents per Gallon
June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June


Stocks of Gas Oil at 124 Mid-Continent Refineries
Price of 32-36 Gas Oil (Group 3) SEE SCALE AT RIGHT
Shipments
Production
Millions of Gallons
Price in Cents per Gallon
June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June

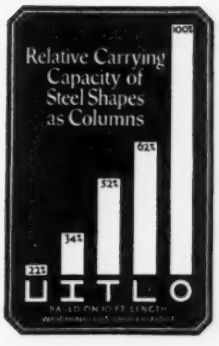

Stocks of Fuel Oil at 124 Mid-Continent Refineries
Price of 24-26 Fuel Oil (Group 3) SEE SCALE AT RIGHT
Shipments
Production
Millions of Gallons
Price in Dollars per Barrel
June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May June

Moore

IBULAR STEEL DERRICKS

Lowest Upkeep Cost!

MOORE upkeep is lowest because of several definite features. The greater strength of tubular leg sections and girts means lighter weight. The consequent saving in transportation and handling charges is considerable. The Moore patented clamp and track bolt assure easier and quicker erection, and with common labor instead of skilled workmen. The use of reinforcing legs converts a pumping derrick into a drilling derrick, or vice versa. These supplementary legs are used over and over again. A Moore Tubular Steel Derrick is easily dismantled and re-erected. Five to ten years' use, in different locations, often results in savings equal to its entire first cost.



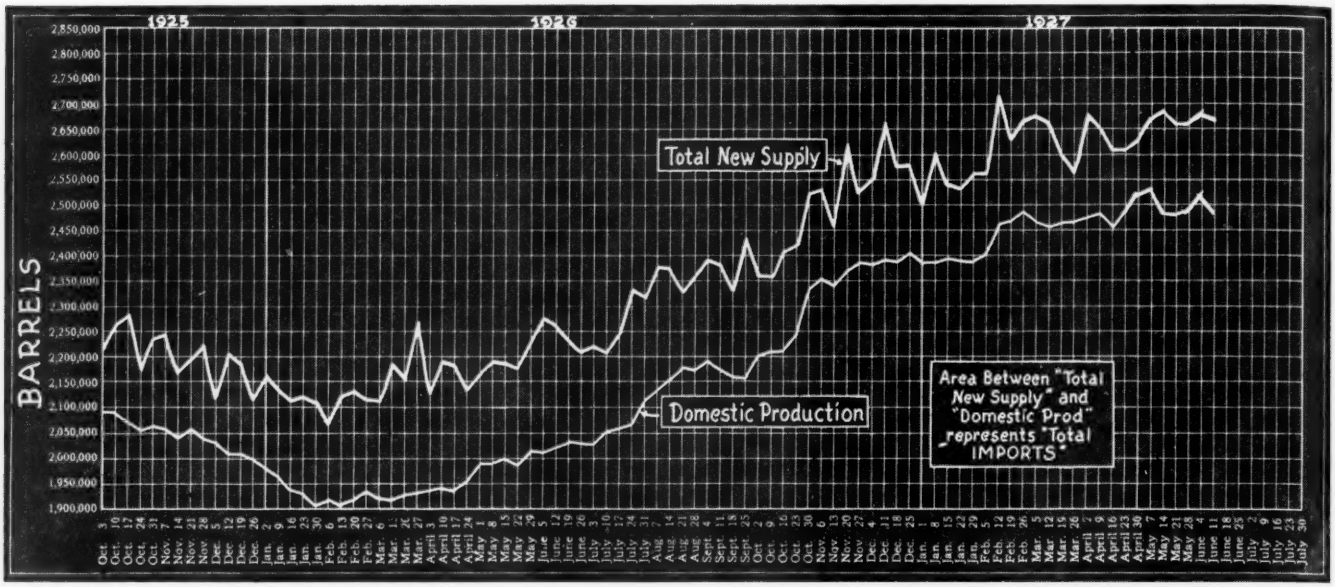
World Wide Service for Twenty Years

LEE C. MOORE & CO., *Inc.* PITTSBURGH · TULSA

Established 1907

DALLAS, TEXAS HOUSTON, TEXAS WICHITA FALLS, TEXAS ISOM, TEXAS PARKERSBURG, W. VA.
CASPER, WYO. SHREVEPORT, LA. EL DORADO, KAN. EL DORADO, ARK.

Daily Average Crude Oil Production and Imports



Daily average gross output of United States, by fields, for week ending with dates below as compiled by American Petroleum Institute

PRODUCTION SUMMARY

	June 11	June 4
Production east of Rockies	1,854,650	1,870,900
Decrease		16,250
Total Production in U. S.	2,498,450	2,507,300
Decrease		8,850
Crude Oil Imports	168,714	178,000
Decrease		9,286
Total Crude Supply	2,667,164	2,685,300
Decrease		18,136

OKLAHOMA

	June 11	June 4
North Braman	4,850	4,950
South Braman	3,700	3,350
Blackwell	3,750	3,800
Hubbard	6,600	7,750
Thomas	5,100	5,400
Tonkawa	21,650	21,950
Garber	14,250	14,300
Burbank	45,700	45,550
Osage, outside Burbank	32,350	32,950
Cushing	21,450	21,500
Watchorn	2,400	2,450
Yale Jennings	11,550	11,650
Davenport	3,300	3,350
Bristow-Slick	26,800	27,150
North Okmulgee	16,950	17,100
Lyons-Deaner	5,400	5,500
Stroud	1,050	1,400
Cromwell	13,000	12,650
Papoose	7,150	7,100
Wewoka	18,750	19,050
Seminole	298,300	296,750
Earlsboro	64,050	63,750
Duncan district	7,000	7,050
Graham	7,850	7,900
Fox	1,850	1,850
Healdton	14,900	14,900
Hewitt	10,000	10,000
Scholem-Alechem	16,850	16,700
Others	64,150	63,700
Total Oklahoma	750,700	751,500
Decrease		800

KANSAS

Greenwood County	37,000	37,500
Florence-Covert	1,800	1,800
Peabody-Elbing	3,750	3,750
Eldorado-Towanda	13,700	13,700
Augusta-Fox-Bush	4,400	4,400
Rainbow Bend	2,350	2,400
Russell	2,950	2,950
Churchill	18,400	18,550
Others	28,400	28,700
Total, Kansas	112,750	113,750
Decrease		1,000

NORTH LOUISIANA

Homer	5,100	5,150
Haynesville	7,800	7,700
Caddo, light	9,700	10,050
Caddo, heavy	4,850	4,500
De Soto, Red River	3,850	3,900
Elm Grove	700	700
Bellevue	1,350	1,400
Cotton Valley	5,750	5,650
Urania	8,600	8,050
Pleasant Hill	650	400
Total, North Louisiana	48,350	47,500
Increase		850

ARKANSAS

El Dorado	6,250	6,300
Smackover, light	11,200	11,300
Smackover, heavy	87,500	88,600
Stephens	1,400	1,500
Nevada	1,450	1,450
Lisbon	3,800	3,850
Others	150	100
Total, Arkansas	111,750	113,000
Decrease		1,250

TEXAS (OUTSIDE GULF COAST)

Panhandle District

Hutchinson County	102,700	112,600
Carson County	12,300	12,800
Gray County	12,050	12,800
Wheeler County	2,450	2,200
Others	50	50
Total Panhandle District	129,550	140,450
Decrease		10,900

North Texas

Burkburnett	12,950	12,500
Electra	13,300	13,050
Iowa Park and K-M-A	3,400	3,500
Wilbarger	13,250	13,000
Archer County	30,300	30,000
Montague-Cooke	14,050	14,550
Others	850	850
Total, North Texas	88,100	87,450
Increase		650

West Central Texas

Stephens County	8,900	8,800
Eastland-Desdemona	7,200	7,050
Brown County	29,050	28,800
Coleman County	1,200	1,200
Callahan County	3,750	3,900
Shackleford County	11,300	11,450
Young County	8,400	8,500
Throckmorton County	2,950	3,000
Palo Pinto County	1,600	1,700
Others	1,200	1,200
Total West Central Texas	75,550	75,600
Decrease		50

West Texas

Jones County	2,300	2,250
Mitchell and Scurry Counties	3,700	3,650
Howard County	2,750	2,700
Reagan County	26,250	26,400
Crane and Upton Counties	70,850	65,650
Crockett County	1,200	1,200
Pecos County	9,750	13,150
Others	3,300	2,800
Total, West Texas	120,100	117,800
Increase		2,300

East Central Texas

	June 11	June 4
Mexia	10,850	11,000
Curie	600	600
Richland	1,050	900
Wortham	3,450	3,000
Corsicana-Powell	17,600	19,000
Nigger Creek	3,950	4,000
Total, East Cent. Texas	37,500	38,500
Decrease		1,000

Southwest Texas

Luling	16,300	16,450
Lytton Springs	2,000	2,100
Somerset	1,200	1,200
Laredo District	13,750	14,000
Piedras Pintas	50	50
Others	600	600
Total, Southwest Texas	33,900	34,400
Decrease		500
Total, Texas—(Outside Gulf Coast)	484,700	494,200
Decrease		9,500

GULF COAST

Coastal Texas

West Columbia	9,850	9,850
Damon Mound	950	950
Big Creek	4,200	4,150
Boling	2,050	2,050
Blue Ridge	3,050	2,500
Pierce Junction	7,750	8,850
Humble	3,600	3,600
Goose Creek	8,350	8,550
South Liberty	3,000	3,100
Hull	18,050	17,550
Saratoga	1,250	1,000
Batson	1,350	1,500
Sour Lake	4,500	4,400
Spindletop	56,050	57,900
Orange County	5,600	5,500
Others	4,400	4,550
Total, Coastal Texas	134,000	136,100
Decrease		1,900

Coastal Louisiana

Vinton	5,050	5,250
Lockport	7,000	6,000
Evangeline	1,000	1,000
Edgerly	1,250	700
Others	1,050	1,550
Total, Coastal Louisiana	15,350	14,500
Increase		850
Total, Gulf Coast	149,350	150,600
Decrease		250

ROCKY MOUNTAIN

Wyoming

	June 11	June 4
Salt Creek	42,950	45,600
Grass Creek	2,700	2,550
Elk Basin	900	850
Big Muddy	2,700	2,750
Lost Soldier	3,350	1,800

(*Continued on Page 40*)

In 1926 One Company Purchased

283 MILES
OF LA BELLE LINE PIPE
and Every Joint O. K.!

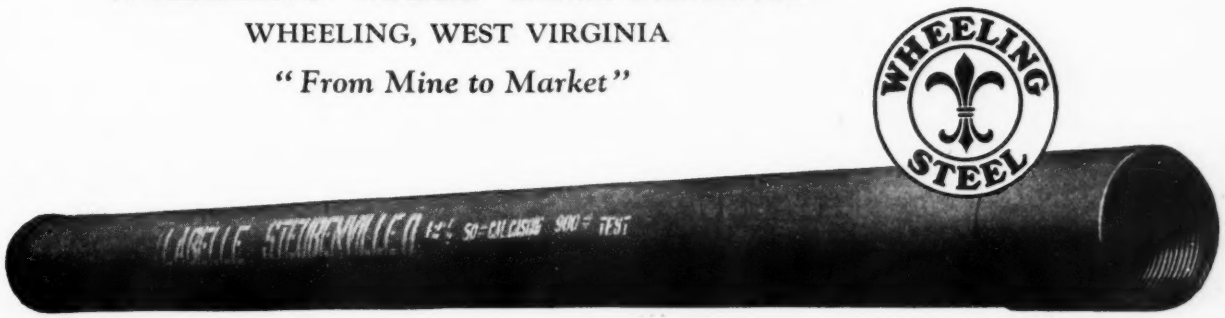
OF ITSELF, this is not significant, yet when it is considered that among a total of 1,494,240 feet of line pipe bought *and installed* within one year by one company, there was not one joint below the customary standard of Wheeling manufacture, it is something worth remembering.

Approximately 74,712 joints, some plain ends, but thousands with threads and couplings, multiply chances for error or slip-ups in inspection, but every joint was La Belle and proved O.K.

"From Mine to Market," manufacture is complete; so is its control, which insures good steel, uniformly fabricated into pipe which serves its purpose whether for tubing, casing or line.

Insist upon La Belle, which is Wheeling-made.

WHEELING STEEL CORPORATION
WHEELING, WEST VIRGINIA
"From Mine to Market"



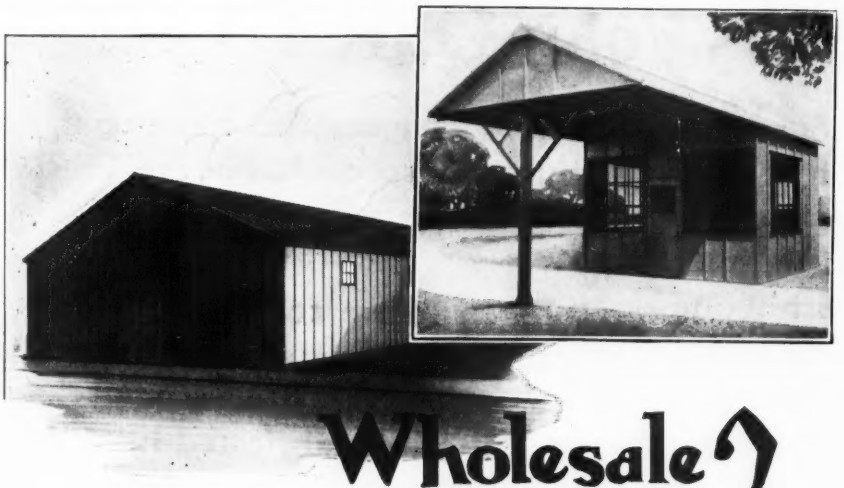
LA BELLE

CASING · TUBING · LINE PIPE

BETHLEHEM
WAX PLANT EQUIPMENT

Filter Presses — *Wax Moulding Presses*
Wax Distillate Chilling Machines — *Scale Wax Cooling Drums*
Wax Testing Presses — *Paraffine Wax Sweater Plants*
Complete Wax Plants designed and built
Pumps, Stills, Towers, Condensers and other Oil Refinery Equipment
Oil Burning Systems — *Complete Power Plant Equipment*

BETHLEHEM STEEL COMPANY, *General Offices, Bethlehem, Pa.*
District Offices
New York Boston Philadelphia Baltimore Washington Atlanta Pittsburgh Buffalo Cleveland Detroit Cincinnati Chicago St. Louis San Francisco Los Angeles Seattle Portland



Wholesale or Retail?
there is a Marion Metal Building for practically any purpose

Marion Metal Buildings are made of galvanized steel. The panels are of standard sizes and have a patented interlocking joint that gives strength to the building and makes a weather-tight joint. They are easily and quickly erected. A man and helper with pliers, hammer and screwdriver can erect one of these buildings in a day. They can be easily taken down and moved to new location if desired, without loss. They are fireproof and lightning proof when properly grounded.

Around refineries they are used as Sheds for Stills, Tool Houses, Machine Shops, Pipe Shops, Car Shops, Paint Shops, Wax Plants, Pump Houses, Power Houses, Auxiliaries and Garages.

In the oil distributing and marketing division they are used for Compounding Plants, Grease Plants, Warehouses, Bulk Filling Stations, Retail Filling Stations, Garages, etc.

The coupon below is for your convenience.

Marion Machine, Foundry & Supply Co.
Box T685, Marion, Indiana

We desire further information concerning your Metal Buildings. Please Mail Catalog No. 7.

Name _____

Address _____

Crude Production

(*Continued from page 38*)

	June 11	June 4
Rock River	2,850	2,800
Lance Creek	450	500
Teapot Dome	800	1,300
Others	4,050	3,800
Total, Wyoming	60,750	61,950
Decrease		1,200
Montana		
Cat Creek	2,200	2,300
Sunburst	11,200	11,200
Others	200	200
Total, Montana	13,600	13,700
Decrease		100
Colorado		
Moffat (Craig)	1,700	1,750
Fort Collins	3,200	2,900
Florence	1,000	900
Others	1,500	1,600
Total, Colorado	7,400	7,150
Increase		250
New Mexico		
Table Mesa	200	600
Artesia	1,700	750
Hogback	750	1,700
Rattlesnake	150	500
Total, New Mexico	2,800	3,550
Decrease		750
Total, Rocky Mountain	84,500	86,350
Decrease		1,800
CALIFORNIA		
Santa Fe Springs	41,000	41,000
Long Beach	95,000	96,000
Huntington Beach	76,500	76,000
Torrance	23,500	23,500
Dominguez	17,000	17,500
Rosecrans	10,000	10,500
Inglewood	35,000	36,000
Midway-Sunset	89,500	91,000
Ventura Avenue	37,300	37,700
Seal Beach	68,000	54,000
Others	151,000	153,200
Total, California	643,800	636,400
Increase		7,400
EASTERN		
Including Ill., Ind., Ky., Ohio, W. Va., Pa., and N. Y.	112,500	114,000
Decrease		1,500

Correction

Prices of Oklahoma 56-58 U. S. Motor and 58-60, 450 e.p. gasolines in the refinery market table of this issue, page 99, are transposed in the June 13 column. Price of 56-58 U. S. Motor should be 6.50 cents, with double dagger to designate "only one refiner quoting" and price of 58-60, 150 e.p. gasoline should be 6.50 to 6.625 cents.

In north Texas, prices for a 64-66, 390 e.p. gasoline are published in the June 13 column. This grade should be eliminated in the June 13 column, and 60-62, 400 e.p. gasoline substituted, at 6.75 to 6.875 cents.

All other refinery prices as published on pages 99 and 101 in this issue are correct for dates designated, and supersede those published in the June 8 and June 1 issues under columns dated June 6 and May 31, respectively.

Tank wagon and service station prices of gasoline at Fort Worth, San Antonio and Dallas were advanced 2 cents, instead of reduced 1 cent, as stated on page 102 of this week's issue. Prices published on page 103 under Magnolia Petroleum territory at these three cities, are incorrect. Correct prices are 18 cents, instead of 15 cents. All places in Texas where tank wagon price, exclusive of tax, had been below 12 cents, except Beaumont, were increased to 12 cents, June 13.

Seminole Gas Lift Wells Abandoned After Flowing Ceases

By A. F. Hinton
N. P. N. STAFF WRITER

TULSA, June 11.

IT IS probable that never in the oil business has there been a subject about which so many discussions have revolved, nor so many divergent opinions held as the air-gas lift method of producing oil. In the development of the Seminole district, air-lift has seen its largest application, and has been principally responsible for assuring that district a place in history as one of the greatest oil-producing areas of the world.

Seminole, as a Wilcox sand producer, is now nearly a year old. It was discovered July 16, 1926, to be exact. Gas and air lifts have been used there since last October. In the ensuing eight months, undoubtedly a great deal has been learned about the practical application of this method of production—but still the arguments and discussions go on.

In the role of "inquiring reporter" buttonholing innocent passers-by and asking them more or less sensible questions, the writer has recently called on a number of engineers and production men for enlightenment as to what has been the effect and what will be the final result of gas-lift production. What shape will these wells be in when they have reached the point where gas-lift is no longer an economical method of producing them? That was one of the questions. Another was: How much does it cost to equip wells with gas-lift? Also, we wanted to know, what would Seminole have done in the way of production had it not been for the gas-lift method? Many other questions were fired at the innocent victims, these being given merely as samples. All the remainder of this story is an attempted digest of the answers received.

At present there are 507 wells producing in the Seminole district. Production the past week averaged 362,350 barrels a day, or about 715 barrels per well. In the Wilcox sand alone there are 420 wells making 350,000 barrels daily, an average of 833 barrels per well. Estimating that there are 325 wells on gas-lift, it is likely they are producing 275,000 barrels a day. If these wells were pumping or swabbing, it is estimated they would be producing 70,000 barrels instead of 275,000. On that basis, if it were not for the gas-lift, the entire district would be producing 157,350 barrels, instead of more than 360,000 barrels.

It is the general opinion that a Seminole well in its first year will produce as much oil as it would have produced under ordinary methods in four years. Some engineers say three years, some five. At any rate, opinion is unanimous that Seminole's first year production will be several times as great as it would had it been necessary to pump or swab all of the wells. It must be remembered that the gas-oil ratio at Seminole proper was one of the lowest on record for a flush field, and at Bowlegs it is even lower. Seminole wells had a short flowing life, while at Bowlegs most of them do not flow naturally at all.

Efforts are being made, and will continue to be made, to pump these deep wells when they no longer function properly on gas-lift, but so far, the companies are not enthusiastic about results obtained by pumping. If a Seminole well pumps less than 50 barrels daily, it is hard to see how it can be profitable at present prices of crude. If they are down only half the time, these wells are supposed to be getting by nicely. The loose sand caving into bottom of hole causes constant trouble with valves and cups, crooked holes cause trouble with rods and tubing, and only the heaviest, most expensive equipment can be used.

Some of the largest companies have about reached the conclusion that they will continue to operate their Seminole wells on gas-lift just as long as they will respond to it, and as long as it is commercially profitable so to operate them. By experimentation and improvement in efficiency of the lift, these wells are going to continue to operate on gas-lift until they reach a surprisingly low production level. When the time comes they

(*Continued on page* 44)

BULLETIN

Seminole Reaches 372,000 Barrels

TULSA, June 14.—Seminole district's production June 13 totaled 372,510 barrels from 511 wells, an increase of 10,368 barrels over Saturday's production.

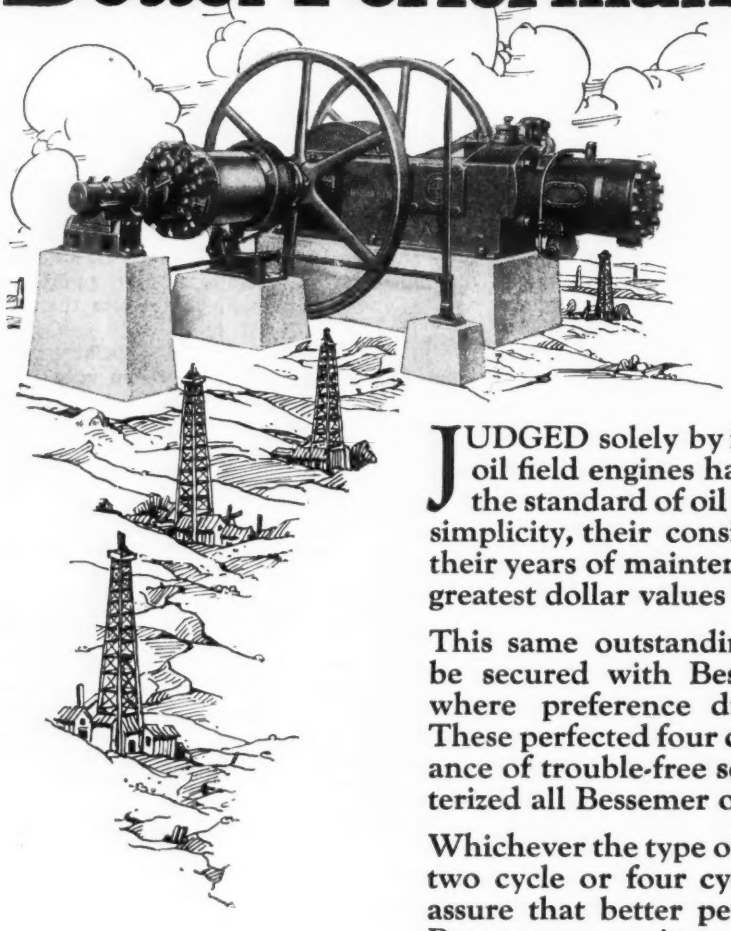
Drilling Operations in Oklahoma, Kansas and Texas, Week Ended June 11, 1927

	June 11 Week Ended					June 4 Week Ended				
	Loc.	Rigs.	Drg.	S.D.	Total	Loc.	Rigs.	Drg.	S.D.	Total
OKLAHOMA										
Burbank	..	4	15	6	25	..	6	18	6	30
Other Osage	6	8	24	5	43	10	4	24	5	43
Bristow-Cushing	6	7	50	10	73	5	4	60	10	79
North Oklahoma	3	8	75	37	123	5	8	71	37	121
South Oklahoma	10	14	148	40	212	11	14	156	40	221
Muskogee	..	10	21	16	47	..	7	25	15	47
Okmulgee-Bristow	6	40	74	19	139	6	44	80	21	151
Tonkawa	..	4	3	1	8	3	1	2	1	7
Seminole Dist.	30	39	546	44	659	32	41	551	49	673
Total Oklahoma	61	134	956	178	1,329	72	129	987	184	1,372
KANSAS	38	55	121	79	293	37	58	128	77	300
TEXAS										
Central	..	116	238	182	536	..	138	221	176	535
East	..	..	7	9	16	..	..	8	11	19
Panhandle	..	114	202	97	413	..	104	194	109	407
N. Central	..	40	99	35	174	..	51	101	29	181
West	..	86	152	69	307	..	97	158	62	317
Laredo	..	1	34	17	52	..	1	34	17	52
Total Texas	..	357	730	409	1,498	..	391	716	404	1,511
GRAND TOTAL	99	546	1,809	666	3,120	109	578	1,831	665	3,183

Summary of Seminole District Production as of June 10, 1927, by Companies having 10,000 barrels or more daily production.

	Bowlegs		Earlsboro		Searight		Seminole		Total	
	Wells	Prod.	Wells	Prod.	Wells	Prod.	Wels	Prod.	Wells	Prod.
Amerada	8	10,115	4	11,845	0	0	12	3,644	24	25,604
Atlantic	6	10,311	0	0	0	0	6	245	12	10,556
Barnsdall	2	242	3	5,876	0	0	13	7,176	18	13,294
Carter	9	19,605	0	0	12	17,640	51	38,532	72	75,777
Gypsy	6	4,387	10	10,204	1	630	24	6,404	41	21,625
I. T. I. O.	29	45,311	0	0	0	0	26	6,868	55	50,179
Magnolia	0	0	5	21,308	0	0	3	1,812	8	23,120
Mid-Cont.	3	1,571	2	3,810	6	6,470	16	2,570	27	14,421
Prairie	6	8,555	1	300	12	5,190	15	3,428	34	17,473
Pure	9	10,071	0	0	2	973	20	8,988	31	20,032
Sinclair	10	13,660	1	0	2	1,035	16	3,750	29	18,445

Better Performance-Longer Life



With either 2-cycle or 4-cycle Bessemer Oil Field Engines

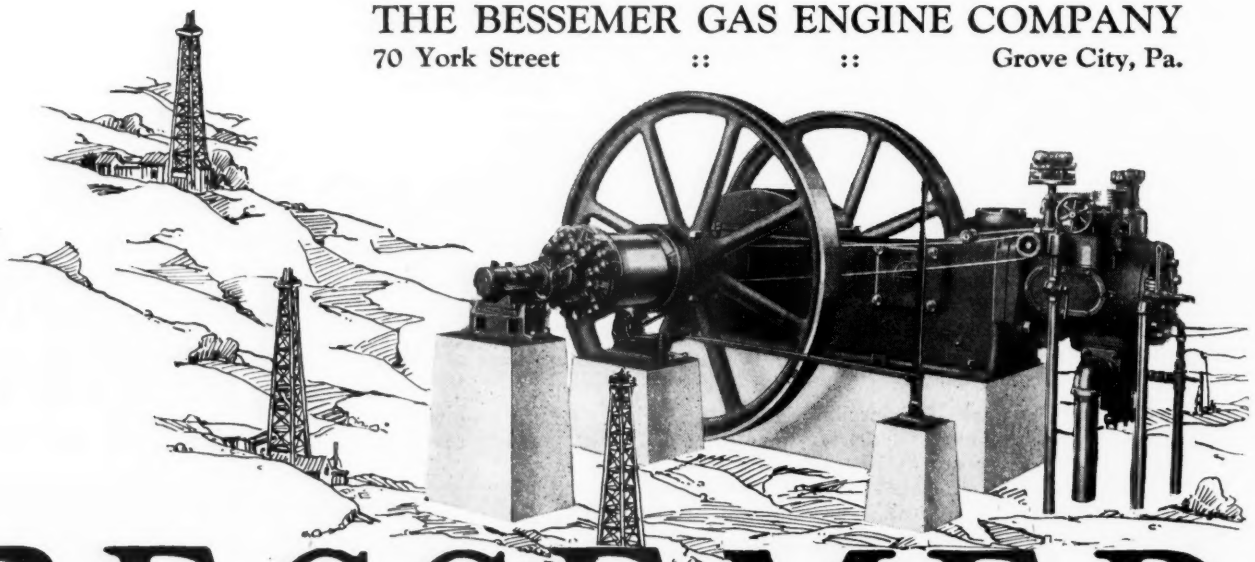
JUDGED solely by its performance, Bessemer two cycle oil field engines have become universally recognized as the standard of oil country power plants. Their rugged simplicity, their consistent 99%+ running records, and their years of maintenance free operation mark them the greatest dollar values in oil field engines.

This same outstanding Bessemer performance can also be secured with Bessemer four cycle oil field engines, where preference dictates a four cycle power plant. These perfected four cycle Bessemers have the same assurance of trouble-free serviceability that has always characterized all Bessemer oil field power equipment.

Whichever the type of oil field engine you prefer, whether two cycle or four cycle, you can get it Bessemer built to assure that better performance and longer life that only Bessemers can give you.

THE BESSEMER GAS ENGINE COMPANY

70 York Street :: :: Grove City, Pa.



BESSEMER

BESSEMER OIL FIELD ENGINES – COMPRESSORS VACUUM PUMPS – ROLLER PUMPING POWERS

Seminole District Production by Companies and Leases, June 10 and June 3, 1927

Company	Farm	S.T.R.	June 10 No. Wells	June 10 Prod.	June 3 No. Wells	June 3 Prod.
		BOWLEGS				
Amerada	Rascoe	15- 8-6	8	10,115	8	11,590
Atlantic	Fleet	23- 8-6	2	4,425	1	4,008
Atlantic	Jones	16- 8-6	2	1,008	2	1,015
Atlantic	Baker	10- 8-6	2	4,878	2	3,310
Total Atlantic			6	10,311	5	8,333
Barnsdall	McNac	28- 8-6	1	0	1	60
Barnsdall	Murrow	11- 8-6	1	242	1	671
Total Barnsdall			2	242	2	731
Carter	Harjoche	15- 8-6	4	5,595	4	5,195
Carter	Walker	15- 8-6	1	3,070	1	3,695
Carter	Wise	23- 8-5	4	5,815	4	9,455
Total Carter			9	19,605	9	21,580
Empire	Lacey	14- 8-6	4	6,644	4	5,736
Gypsy	Brown	33- 8-6	1	107	1	80
Gypsy	Walker	15- 8-6	5	4,280	5	5,262
Total Gypsy			6	4,387	6	5,342
Independent	Coker	21- 8-6	1	430	0	0
I. T. I. O.	Davis	13- 8-6	2	3,492	2	3,895
I. T. I. O.	Goforth	15- 8-6	8	10,239	6	11,573
I. T. I. O.	Livingston	15- 8-6	8	14,294	7	16,203
I. T. I. O.	Walker	15- 8-6	6	7,943	4	7,814
I. T. I. O.	Wilmont	15- 8-6	3	3,810	3	2,480
I. T. I. O.	Youngblood	24- 8-6	2	3,578	2	4,003
Total I. T. I. O.			29	43,311	24	46,168
McCulloch	Bowlegs	22- 8-6	1	0	1	265
Mid-Continent	Baker	10- 8-6	2	1,511	2	1,976
Mid-Continent	Hutke	24- 8-6	1	60	1	1,050
Total Mid-Continent			3	1,571	3	3,036
Minnehoma	Bowlegs	15- 8-6	1	2,236	1	716
Prairie	Gahagan	23- 8-6	1	2,740	1	3,300
Prairie	Harber	10- 8-6	3	5,076	3	4,445
Prairie	Whitney	23- 8-6	2	740	2	325
Total Prairie			6	8,555	6	8,070
Pure	Reed	14- 8-6	9	10,071	7	11,906
Roxana	Taylor	16- 8-6	4	814	4	1,275
Sinclair	Adam	22- 8-6	1	50	1	40
Sinclair	Bowlegs	22- 8-6	1	430	1	400
Sinclair	Ellen	11- 8-6	1	1,735	1	610
Sinclair	Harjo	14- 8-6	3	4,475	3	4,035
Sinclair	Jones	8- 8-6	1	2,185	1	850
Sinclair	Taylor	10- 8-6	1	2,505	1	675
Sinclair	Walker	22- 8-6	2	2,280	2	2,660
Total Sinclair			10	13,660	10	9,270
Texas	Reed	14- 8-6	2	5,855	2	6,795
Tidal	Harjoche	10- 8-6	1	1,650	1	1,908
Total Bowlegs			104	140,152	94	142,521
		EARLSBORO				
Amerada	Anderson	15- 9-5	3	6,515	3	7,044
Amerada	Cowden	4- 9-5	1	5,330	1	4,607
Total Amerada			4	11,845	4	11,651
Barnsdall	Savolka	15- 9-5	1	4,559	1	5,362
Barnsdall Smith	Smith	15- 9-5	1	879	1	520
Barnsdall	Peter	10- 9-5	1	438	0	0
Total Barnsdall			3	5,876	2	5,882
Crosbie	Bryant	9- 9-5	1	3,275	1	4,409
Gypsy	Bora	16- 9-5	1	0	1	0
Gypsy	Earl	16- 9-5	1	0	1	0
Gypsy	McFarland	9- 9-5	2	1,177	2	1,500
Gypsy	Peter	10- 9-5	2	3,192	2	3,195
Gypsy	State	16- 9-5	4	5,835	4	6,669
Total Gypsy			10	10,204	10	11,364
Independent	Knappen	8- 9-5	1	2,068	1	3,074
Magnolia	Bryant	9- 9-5	2	6,773	2	6,955
Magnolia	Holmsley	11- 9-5	1	6,644	1	6,741
Magnolia	Sparks	11- 9-5	2	7,891	2	4,940
Total Magnolia			5	21,308	5	18,636
Mid-Continent	McCumber	9-9-5	2	3,810	2	3,980
Phillips	Graham	9-9-5	3	2,377	3	1,785
Philmack	Dobbs	9-9-5	2	877	2	1,339
Prairie	Baker	24- 9-5	1	300	1	260
Sinclair	Foreman	18- 9-5	1	0	1	0
Shallow Sand			30	4,080	30	4,320
Total Earlsboro			65	66,020	63	65,700
		SEMINOLE				
Amerada	Fixico	23- 9-6	4	1,659	4	1,965
Amerada	Killing	23- 9-6	4	490	4	536
Amerada	Rentie	23- 9-6	4	1,495	4	1,561
Total Amerada			12	3,644	12	4,663
Atlantic	N. Cudjo	26- 9-6	4	245	4	400
Atlantic	J. Cudjo	36- 9-6	2	0	2	30
Total Atlantic			6	245	6	430
Barnsdall	Carter	24- 9-6	9	5,142	9	5,538
Barnsdall	Jones	34- 9-6	4	2,034	3	2,750
Total Barnsdall			13	7,176	12	8,288
Carter	B. Carter	24- 9-6	2	215	2	215
Carter	J. Carter	24- 9-6	4	60	4	115
Carter	F. Carter	24- 9-6	3	585	3	635
Carter	R. Cudjo	35- 9-6	3	1,855	3	1,320
Carter	W. Cudjo	34- 9-6	1	505	1	540
Carter	Gilliland	27- 9-6	1	655	1	590
Carter	Grisso	23- 9-6	8	1,435	8	1,820
Carter	Knapp	13- 9-6	3	1,395	3	1,490
Carter	Killing	34- 9-6	12	20,197	12	18,377
Carter	Lukes	27- 9-6	6	3,935	5	3,770
Carter	Simpson	35- 9-6	2	510	2	640
Carter	Strother	34- 9-6	2	5,700	2	5,595
Carter	Vierson	23- 9-6	4	1,485	4	1,545
Total Carter			51	38,532	50	36,652
Empire	Gross	25- 9-6	2	840	2	797
Empire	Wilson	34- 9-6	3	1,326	3	1,646
Total Empire			5	2,166	5	2,443
Gypsy	Butler	35- 9-6	3	1,147	3	1,241
Gypsy	Carter	24- 9-6	8	2,422	8	2,537
Gypsy	Fixico	26- 9-6	5	200	5	245
Gypsy	Harjo	25- 9-6	2	1,005	2	1,077
Gypsy	Wolf	26- 9-6	6	1,435	6	1,910
Total Gypsy			24	6,404	24	7,020
Independent	T. Fixico	26- 9-6	8	1,405	8	1,624
Independent	P. Fixico	23- 9-6	4	345	4	345
Independent	Harjo	25- 9-6	1	0	1	0
Independent	Jones	26- 9-6	4	844	4	690
Total Independent			17	2,549	17	2,659
I. T. I. O.	Bowlegs	26- 9-6	10	4,207	10	4,478
I. T. I. O.	Goodin	23- 9-6	4	755	4	876
I. T. I. O.	Harjo	24- 9-6	4	731	4	898
I. T. I. O.	James	24- 9-6	4	1,088	4	1,060
I. T. I. O.	Marcy	13- 9-6	1	87	1	0
I. T. I. O.	Reed	24- 9-6	3	0	3	0
Total I. T. I. O.			26	6,868	26	7,312
Kingwood	Johnson	22- 9-6	5	2,608	5	2,856
Magnolia	Franks	25- 9-6	3	1,812	2	1,752
Mid-Cont.	Rentie	14- 9-6	9	2,065	9	2,215
Mid-Cont.	Tayeche	24- 9-6	7	505	7	695
Total Mid-Continent			16	2,570	16	2,910
Mid-Kansas	Johnson	25- 9-6	1	803	1	785
Mid-Kansas	Pressley	3- 8-6	1	0	1	25
Total Mid-Kansas			2	803	2	810
Philmack	Butler	35- 9-6	2	1,100	2	1,385
Phillips	Strother	27- 9-6	3	900	3	1,262
Prairie	Gross	25- 9-6	5	135	5	30
Prairie	Mason	13- 9-6	1	903	1	1,448
Prairie	Spencer	13- 9-6	1	25	1	0
Prairie	Strother	27- 9-6	8	2,365	7	2,875
Total Prairie			15	3,428	14	4,353
Pure	Strother	26- 9-6	17	3,696	17	5,028
Pure	B. Strother	36- 9-6	3	5,292	3	5,654
Total Pure			20	8,988	20	10,682
Roxana	Harber	22- 9-6	2	681	2	727
Roxana	Lashley	22- 9-6	2	244	2	298
Total Roxana			4	925	4	1,025
Sinclair	Carter	13- 9-6	2	40	2	40
Sinclair	Cudjo-A	35- 9-6	6	1,530	6	1,280
Sinclair	Cudjo-B	35- 9-6	3	1,040	3	960
Sinclair	Dicey	22- 9-6	1	440	1	790
Sinclair	Fixico	23- 9-6	4	700	4	1,115
Sinclair			16	3,750	16	4,185
Slick	Born	35- 9-6	1	0	1	0
Slick	Cudjo	35- 9-6	3	1,936	3	1,500
Slick	Franks	35- 9-6	8	2,665	8	2,417
Slick	Giblet	35- 9-6	1	2,042	1	1,561
Total Slick			13	6,643	13	5,478
Superior	Cudjo	35- 9-6	4	2,496	4	2,243
Texas	Mayhue	14- 9-6	1	30	1	25
Tidal	Carter	24- 9-6	5	2,865	5	2,595
Tidal	Fixico	26- 9-6	7	1,610	7	1,670
Tidal	Harjo	23- 9-6	7	170	7	125
Tidal	Mahardy	21- 9-6	5	1,160	5	1,125
Tidal	Tayeche	25- 9-6	2	2,445	2	2,730
Total Tidal			26	8,250	26	8,245
Turman	Cudjo	35- 9-6	4	1,235	4	1,443
Turman	Grisso	35- 9-6	1	579	1	597
Turman	Jones	34- 9-6	4	4,925	4	5,240
Total Turman			9	6,739	9	7,260
TOTAL SEMINOLE PROPER			295	118,671	290	123,347
		SEARIGHT				
Carter	Davis	4- 9-6	5	9,425	5	7,460
Carter	Frazier	3- 9-6	4	8,135	4	9,085
Carter	Kiker	29- 9-6	1	40	1	35
Carter	Scott	26-10-6	1	40	1	40
Carter	Stewart	34- 9-6	1	0	1	0
Total Carter			12	17,640	12	16,620
Gypsy	Cudjo	4- 9-6	1	630	1	682
Mid-Cont.	Grayson	33-10-6	5	6,435	5	7,015
Mid-Cont.	Saloche	33-10-6	1	35	1	35
Total Mid-Continent			6	6,470	6	7,050
Prairie	Cannon	33-10-6	1	10	1	20
Prairie	Carter	10- 9-6	1	25	1	20
Prairie	Houck	30-10-6	1	15	1	15
Prairie	Kinkade	33-10-6	8	5,100	8	6,580
Prairie	Wiemen	22-10-6	1	40	1	0
Total Prairie			12	5,190	12	6,635
Pure	Aldridge	3- 9-6	2	973	1	860
Roxana	Strother	3- 9-6	1	214	1	296
Searight	Youngblood	33-10-6	2	0	2	0
Sinclair	Polly	3- 9-6	2	1,035	2	1,125
Twin State	Cudjo	4- 9-6	1	1,000	1	865
Wilcox	Chupco	4- 9-6	2	2,818	2	2,108
Total Searight			41	35,970	40	36,241
GRAND TOTAL SEMINOLE DISTRICT			505	360,813	487	367,809

	Wells	Production	Avg. Per Well
Hunton Lime	55	8,100	147.3
Shallow Sand	31	4,105	132.4
Wilcox Sand	419	348,598	832.0
Total	505	360,813	714.5

Completions in Oklahoma and Kansas, Week ended June 11th, 1927

OKLAHOMA

Carter County

Company	Well No.	Location	Depth	Initial Prod.
Magnolia	11	SEc NE NE 10-2-3 W	2781-3022	30
Magnolia	14	SEc SW SE 23-2-3 W	2396-2516	75
Smith	6	NEc NW 26-2-3	3596-3606	35
Carter	2	SWc 8-2-2 W	1938-1977 15 & 15M	
Atlantic	1	SEc NE NE 16-2-2 W	1336-1370	75
Magnolia	7	NEc 19-1-3 W	3456-3467	77
Amerada	11	SWc NW NE NW 20-5-1 E	T.D. 2610	Dry

Comanche County

Dayham	1	SWc NW NE 12-1-13 W	T.D. 910	Dry

Creek County

Sinclair	15	NWc SW SW 9-18-7	2512-2521	90
Silurian	23	CWL E½ NE NE 17-18-7	2483-2516	200
Shaffer	4	NEc SW SW 16-17-8	3449-3498	10
Shaffer et al	1	CEL SE 17-17-8	3434-3478	140
Billingslea	1	SEc SW SW 10-15-8	3185-3197	51M
Lima	1	NWc SE SW 30-15-8	3257-3268	24M
Redgraves et al	2	SWc SE SE 15-18-11	2140-2160	45
Tibbens	1	SEc 5-18-12	1763-1771	¼M
Elson et al	1	NEc NW NW 12-17-10	2482-2496	648
Thompson et al	2	NWc SW 16-17-11	1891-1941	7M
Empire	3	SEc NW SW 32-14-10	3402-3430	60
Slick	6	SWc NE SW 32-14-10	3410-3422	50
Pure	2	NWc SW NW 29-14-8	3435-3443	200
Burk-Greis	2	SEc NW SW 16-17-8	T.D. 3507	Dry
Vaughn et al	6	NEc SE SW 27-18-10	T.D. 2380	Dry
White	1	NWc NE SW NW 14-18-11	T.D. 700	Dry

Creek County

Carter	1	SEc SE SW 1-17-10	T.D. 3002	Dry
Wright	10	CEL SW 24-17-10	T.D. 3432	Dry
Williams et al	1	SWc NW NE 36-16-9	T.D. 3480	Dry
Kissler et al	1	SEc SW NW 27-14-10	T.D. 3352	Dry

Grady County

Gypsy	1	NEc 20-3-5 W	2408-2409	6M
Carter	3	SWc NE SE 34-3-5 W	2234-2235	25M
Carter	3	NWc SW SW 35-3-5 W	1514-1525	5
Garvin	1	SWc NE SW 16-4-6 W	T.D. 3009	Dry

Hughes County

Berry	5	NEc SW NW SE 4-9-9 E	3314-3317	10
Roxana	2	NEc NW NE 35-9-9 E	T.D. 3450	Dry
Magnolia	1	NEc SE 29-7-8-E	T.D. 4268	Dry

Jefferson County

Woods	1	NEc 23-7-7 W	T.D. 2504	Dry

Kay County

Wentz	6	NWc NE 8-28-1 W	1582-1592	3½M
National	1	NEc SW SW NW 21-27-1 E	858-870	¼M
McCullough et al	1	SEc SW SW 31-27-1 W	T.D. 3125	Dry

Muskogee County

Smith	5	NEc SW NE 25-15-15 E	695-711	2½M
Lampton	2	SWc NW SW 9-15-18	742-765	5M
Bradley	5	NEc SW NW SW 5-14-19	703-725	100
Metzger et al	4	NEc SE NE SE 6-14-19	745-763	40
Selby	2	NEc SE SW NE 17-15-17	T.D. 1462	Dry

Okfuskee County

Morton	1	NWc SE 23-11-11	T.D. 3581	Dry

Okmulgee County

Jordan et al	1	C NW NE 27-15-12	2746-2776	2½M
French et al	1	NWc NE NE 7-11-12	1378-1381	10
Prairie	2	SWc NE NE 25-13-11	T.D. 2561	Dry

Osage County

Skelly	6	SWc NW SW 27-27-6	2882-2960	1440
Parker	2	NWc NE SW 28-26-6	2944-2993	366
Parker	3	NEc NW SW 28-26-6	2920-2970	330
Okla. Natl.	767	SEc NE 27-21-10	1629-1640	½M
Stine	7	NWc SE SE 9-21-12	1312-1332	10
Barnsdall	1	CSL SW NE 19-25-6	2946	Dry
Wincona	1	SEc NE SE 17-21-11	2416-T.D.	Dry
S. S. Home	1	SWc 22-20-11	T.D. 2045	Dry

Pawnee County

Backer	1	NEc NW NW k0-20-6	T.D. 3096	7M
Burton	1	SEc NW NW 18-21-8	2030-2050	10
Continental	2	SWc NE SE 32-20-5	2808-2835	80

Payne County

	Well No.	Location	Depth	Initial Prod.
Roxana	1	SWc 13-19-4	3417-3431OWD	8

Seminole County

Magnolia	3	NEc SW SE 10-9-5 E	3542-3557	357
Amerada	4	SWc NW 15-9-5	4259-4330 OWD	591
Carter	1	SWc NW SW 2-9-6	3529-3570	45
Carter	5	SWc NE NW 2-9-6	4405-4432	2600
Roxana	1	NWc SW NE 3-9-6	4080-4164	510
Sinclair	2	NEc SE NE 3-9-6	4057-4155	600
Carter	5	NEc SE NE 27-9-6	4070-4092	1025
Carter	6	SWc SE NE 27-9-6	4085-4112	1200
Slick	3	NEc SE SW 35-9-6	4055-4160	250
Pure	2	NEc NW NW 36-9-6	4236-4248	860
Pure	3	SWc NW NW 36-9-6	4089-4124	2789
Jarvis et al	1	NEc SW NE 7-9-8	3286-3328	128
Atlantic	1	SWc SE SE 10-8-6	4005-4015	3174
Tidal	1	SEc NE SW 10-8-6	4007-4019	2260
Carter	1	SWc NW 14-8-6	4080-4152	2495
Empire	2	NWc SW 14-8-6	4028-4081	2312
Pure	5	SEc SW SE 14-8-6	4179-4220	3426
Carter	1	NEc SW SE 15-8-6	4061-4122 OWD	2910
Gypsy	2	NEc NW SE 15-8-6	4110-4142 OWD	1170
I. T. I. O.	3	SWc NE NE 15-8-6	4200-4228	2120
Minnehoma	2	NWc SW SW 15-8-6	4238-4278	820
Roxana	1	SEc NE 16-8-6	4273-4309	584
Mid-Cont.	1	NWc NE NW 24-8-6	4071-4181	1755
Gypsy	1	SWc SE 33-8-6	4457-4458	987
Homa-Okla.	2	NEc SW SE 29-8-8	3867-3993	185
Prairie	7	SWc NE NE SE 27-9-6	4180-4207	450
Prairie	1	NWc NW SW 36-9-6	4066-4075	1555
Prairie	1	SEc NE SW 21-8-6	T.D. 4546	Dry
McMan et al	1	NWc SE SW 33-11-8	4161-4198	157
Sinclair	1	NWc SW SW 15-9-6	T.D. 3554	Dry
Kingwood et al	6	NWc SE SE 22-9-6	T.D. 4136	Dry
Marland et al	1	SWc NW 16-9-7	T.D. 4416	Dry
Atlantic	2	NWc SE SE 16-8-6	T.D. 1272	Dry
Magnolia	1	NEc 26-8-7	T.D. 5215	Dry

Stephens County

Carter	8	SEc NE NW 2-2-5 W	1466-1477	10
Magnolia	5	SEc NE 24-1-9 W	2290-2293 OWD	½M
Magnolia	17	NEc SW 34-1-8 W	1720-1726	60
Margay	2	SEc NE SE 12-1-9 W	T.D. 2250	Dry

Tulsa County

Welch et al	1	NEc SE SE 18-17-13 E	2160-2187	2M
Tibbens	2	SEc SW 14-18-12	1560-1562	3M
Holmes et al	2	SEc 25-19-10	T.D. 2554	Dry

KANSAS

Butler County

Schwartz et al	1	NWc SW SE NW 19-25-5 E	712-723	35
Rosenthal et al	5	SEc SW SE 4-27-6 E	3144-3152	300
Christy et al	½	SWc SE 14-27-7 E	2672-2716	100
Morgan et al	1	SEc SW NW 24-26-6 E	T.D. 2783	Dry

Cowley County

Twin State	3	NEc SW SE 21-31-4 E	2390-2401	45
Roth-Faurot	1	NEc SE NE 22-32-4 E	2278-2307	4M
Roth-Faurot	1	NEc SE NW 22-32-4 E	2247-2267	100
Brinn et al	1	SWc NE NE 33-31-4 E	T.D. 3471	Dry

Dickinson County

Leeward	1	NEc 23-13-3 E	T.D. 3011	Dry

Greenwood County

Loy-Leader	1	SWc SE 26-22-11 E	T.D. 1998	Dry
Scott et al	1	NWc SE SE 15-23-9 E	T.D. 2425	Dry
Flack et al	1	NEc SE 26-26-8 E	T.D. 2390	Dry
Murphy et al	1	NEc SW 7-26-10 E	T.D. 2169	Dry

Rice County

Phillips	1	SWc NE NW 35-20-6 W	3375-3450	25
Miss. Valley	1	C NE 34-21-7 W	T.D. 4012	Dry

Reno County

T. B. Slick	1	SEc NW SW 25-26-9 W	T.D. 2507	Dry

Sumner County

Roxana	6	C N½ 36-31-2 E	1885-1910	650
Roxana	2	NEc NW NW 36-31-2 E	1861-1892	35
Amerada	1	SEc SW NW 14-32-2 E	T.D. 3574	Dry

(*Continued from page* 41)

can no longer be flowed economically, it is very likely that most of these wells will be abandoned. One big company estimates that the average life of Seminole wells on gas-lift will be from 10 months to a year. Then they will either be abandoned or will be small pumpers. Only the best wells from the standpoint of hole conditions, amount of water, and the like, will be put on the pump.

There are now about 15 wells in Seminole that have been flowed on gas-lift to the point they are so depleted they will not produce any oil at all, either by pumping or swabbing. These wells are simply dead and will be abandoned. If theis is typical of the future of all Seminole wells, we can expect that by next September or October three-quarters of the wells in 9-6 (the original Seminole field) will be in much the same condition. Possibly not altogether dead, but producing very small amounts of oil.

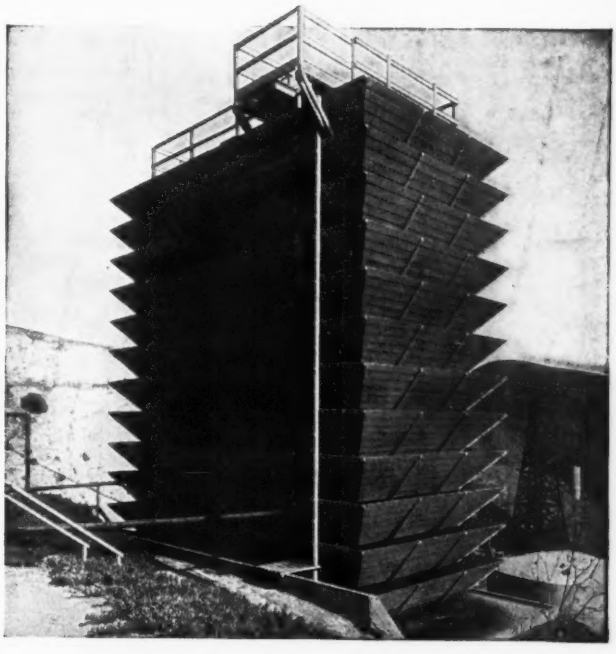
It is beileved that, while Seminole wells will produce four years' ordinary production in one year, they will produce nothing at all over the long period of years during which the ordinary well can be expected to rock along as a small pumper with very slight decline. This raises the question as to whether ultimate yield of gas-lift wells will be greater or less than that of pumped wells. This question, of course, can never be answered with complete satisfaction, as there is no way of telling what a well's ultimate production will be until it has made it—and when it has made it, there is no good way of telling what it would have been if some other production method had been used.

However, engineers appear to incline to the belief that it will be about an even break; that is, the large excess amount of oil taken out during the year of gas-lift will just about equal the small amount pumped over a period of later years. If the

Reading Pipe
"Cheaper in the Long Run"

Birch Oil Company Tries Steel Pipe for a Cooling Tower for 2 months—that's all it lasted

Now They Specify READING



Cooling Tower on the Property of Birch Oil Company

Reading Iron Company,
441 Pacific Mutual Building,
Los Angeles, California.

Gentlemen:

Replying to your inquiry as to the reason for our specifying "Reading Iron Pipe" on our order a short time ago, we beg to advise that this pipe was to be used for cooling coils in our water tower, and our previous experience demonstrated that steel pipe would not withstand certain elements in the water which caused corrosion, whereas, the iron pipe was not affected in the least.

When this cooling tower was built about a year ago, we installed second hand Reading Iron Tubing for coils, and these coils are in just as good condition today as they were when put into operation. About two or three months ago we found it necessary to install additional coils, and as we had no Reading Tubing on hand at the time, we built these of steel tubing which lasted about two months and were replaced with the Reading Iron purchased a short time ago. After about two months service the steel tubing had corroded so bad, that leaks were discovered in many places, and on examination, we found the entire steel installation completely gone.

We also find Reading Iron Tubing an eliminator of trouble in crooked holes where we have had considerable trouble with rod cut tubing. The Iron tubing apparently withstands the abrasive effect caused from continual contact with the rod couplings better than the harder steel tubing.

Although the first cost may be slightly higher, we feel that in many instances the Reading Iron installation will prove cheaper in the long run.

Thanking you for the interest you have shown in our past relationship, and assuring you of our hearty cooperation, we are,

Yours very truly,

BIRCH OIL CO.

J. H. Royer

Superintendent

READING PIPE
GENUINE WROUGHT IRON

READING IRON COMPANY HOUSTON, TULSA, SHREVEPORT, LOS ANGELES READING, PENNSYLVANIA

Texas Completions, Week Ended June 11th, 1927

NORTH-EAST-CENTRAL DISTRICT

Brown County

Company	Well Farm	Location	Depth	Init. Prod.
Phillips	6-Hickman	Benson	1210-1230	200
Hughes	13-Shore	Ryan	1248-1269	500
Hughes	26-Shore	Ryan	1273-1296	1200
McKenna et al	12-Shore	Betts	1306-1328	600
McKenna et al	19-Shore	Betts	1312-1334	800
Texas	50-Shore	Ryan	1278-1301	250
Texas	54-Lowe	Stubblefield	1262-1285	200
Texas	58-Lowe	Stubble	1295-1323	100
Texas	60-Lowe	Stubble	1290-1315	300
Texas	64-Lowe	Stubble	1261-1280	272
Wentz	17-Shore	Betts	1311-1330	394
Wentz	19-Shore	Betts	1312-1329	250
Gordon et al	1-Brown	Coffey	T.D. 1319	Dry
Anderson et al	1-Armstrong	Curlong	T.D. 1320	Dry
Elam et al	1-Lucas	Hunt	T.D. 1810	Dry
Shoup	1-Ratcliff	Neil	T.D. 1501	Dry

Callahan County

Beams et al	1-Jackson	ET	914-924	12
Navarro	2-Booths	Comal	T.D. 1753	Dry
Texas	14-Clifford	TEL	T.D. 2160	Dry

Cherokee County

Nicholle et al	1-Hill	Dusk	T.D. 2620	Dry

Eastland County

Root et al	2-Ray	H & TC	T.D. 2050	Dry

Freestone County

Kechi	1-Pickens	Prewitt	T.D. 4276	Dry

Jack County

Leedecker et al	1-Hallman	Rice	2014-2023	132

Mitchell County

Cal	2-Swenson	TP	2930–3050	73

Shackelford County

Phillips	2-Compton	BAL	3535-3564	6
Republic	4-Meyers	GH&H	1005-1012	7
Zeigler et al	1-Reeves	BBB&C	T.D. 2260	Dry
Moore	1-Colbert	ACH&B	T.D. 2018	Dry
Cato	1-Mathews	ET	T.D. 1260	Dry
Gibson et al	1-Mathers	ET	1085	Dry
Mid-Tex	1-Newell	GH&H	T.D. 1504	Dry
Tomberlin	1-Harvey	TP	T.D. 2250	Dry
Osage	1-Hill	BAL	T.D. 1250	Dry

Stephens County

Tex-Fidel	9-Pratt	TP	1910-2009	15
Phillips	1-Post	TP	1850-1911	12M
Tex-Pac	70-Binney	TP	1874-1890	42
Tripplehorn	4-Walker	TP	T.D. 3900	Dry

Taylor County

Grisham et al	1-Huddleston	GCSF	T.D. 2782	Dry

Throckmorton County

Red Bank	4-Parrott	TEL	3908-3925	2500
Parker	1-Mathews	GCSF	T.D. 1916	Dry

Young County

Coons et al	2-Morrison	Hammond	3815-3876	55

NORTH TEXAS

Archer County

Hammon	1-Hughes	CDSL	600-602	28
Gulf	2-Wilson	SP	1532-1539	190
Maer et al	6-Wilson	DL&C	1530-1537	210
Consolidated	3-Wilson	ATNC	1240-1246	35
Petroleum Prod	7-Turberville	Carson	1464-1474	205
Jeffers	1-Jackson	Aldridge	T.D. 1606	Dry
Consol	1 Thomas	Thomas	T.D. 1201	Dry

Cooke County

Hedrick	5-Kleiss	Littleton	1642-1664	300
McElreath et al	1-Cannon	DeGuire	T.D. 1762	Dry
Sowell	1-Mitchell	BBB&C	T.D. 2392	Dry

Denton County

Gainesville	1-Fortenberry		T.D. 2525	Dry

Montague County

Company	Well Farm	Location	Depth	Init. Prod.
Continental	1-Crow	Chambliss	810-815	16
Skinner et al	1-Maddox	Chambliss	805-920	22
Continental	21-Maddox	Arnold	906-928	45
McGinley	1-Gist	Chambliss	T.D. 1652	Dry
Bridwell et al	1-Crenshaw	Wallace	T.D. 3417	Dry
Campbell et al	1-Haralson		T.D. 2010	Dry

Wichita County

Pet. Prod	1-Munger	WVFL	1145-1151	26
Panhandle	1-Daune	SP	1829-1830	25
O'Neil et al	1-Allingham	H&TC	T.D. 2155	Dry

Wilbarger County

Fain et al	9-Fluhman	DC'L	1874-1869	137
Consol	4-Waggoner	H&TC	1248-1251	10
Murchison	2-Waggoner	H&TC	2002-2019	20
Phillips	6-Waggoner	H&TC	2289-2292	20

Wilbarger

Phillips	6-Waggoner	H&TC	T.D. 2725	Dry

Wise County

Little	1-Houston	Falls	T.D. 2690	Dry

N. Young County

Halbrooke et al	1-Davis	TEL	891-899	26
Tidwell et al	1-Gray	TEL	T.D. 1212	Dry
Wichita	1-Cheives	Akles	T.D. 1086	Dry

PANHANDLE

Carson County

Marland	2-Jordan	I&GN	3095-3175	25
Magnolia	2-Magnolia	I&GN	2795-2940	172
J. T. Parks	1-McConnell	I&GN	3115-3124	227
Gulf Prod	4-Noel	I&GN	3162-3185	15
Gulf Prod	5-Noel	I&GN	3161-3245	145
J. K. Hughes	8-Percival	I&GN	3141-3145	200

Gray County

Pure Oil	5-Davis	I&GN	3210-3230	194
Wilcox	23-Worley-Reynolds	I&GN	2961-3035	25
Texas	5-Saunders	B&B	2790-2812	197
Travis et al	1-Back	I&GN	2845-2850	800

Hutchinson County

Marland	1-Sanford	B&TC	3000-3006	60
Devonian	7-Johnson	Whitley	2934-2976	25
Phillips	21-Patton et al.	Whitley	2900-2925	50
Wiles-Keoch	1-Smith	M&C	2679-2760	300

Wheeler County

Gibson	2-Bentley	I&GN	2310-2346	50

WEST TEXAS

Crane County

The Texas	1-Univ.	Univ.	2830-2979	600
Magnolia	4-Hardwick	Univ.	2860-2970	900
Magnolia	5-Hardwick	Univ.	2910-2985	367
Magnolia	6-Hardwick	Univ.	2875-2950	240
Magnolia	7-O'Keefe	Univ.	3025-3069	150
Magnolia	9-O'Keefe	Univ.	2925-2970	300
Simms Atlantic	2-Collett	Univ.	2805-2905	970
Tidal	2-Univ.	Univ.	3055-3071	65

Crosby County

Capitan	1-Robertson		T.D. 3756	Dry

Dickens County

Moutary	1-Jones	H&GN	T.D. 3950	Dry

Howard County

Merrick et al	3-Hooks	W&NW	1799-1813	80

Pecos County

Humble	1-J.T. McElroy	H&GN	T.D. 2010	Dry

Upton County

Texas Pac	8-Lane	GC&SF	1982-2031	800
Texas Pac	9-Lane	GC&SF	2040-2070	300
Gulf Prod	1-Lane	GC&SF	1975-1983	1983
The Texas	19-King	CCSD	T.D. 3163	Dry

Winkler County

Southern	67-Hindricks	PSL	3051-3065	175

writer may venture an opinion in this compilation of other people's ideas, it seems to him that the balance probably would be in favor of the pumped well over the long pull.

Getting the oil out in large doses and quickly has its advantages, as it is undoubtedly the most economical way to produce, for the investment in property and development is quickly returned. It is unfortunate, of course, that at the same time it tends to drive crude prices downward, thus diminishing the income from the property. When taking the oil out slowly, such as by pumping, after the flush has gone off the property, lifting costs get higher as production gets lower, until at last the well reaches its economic limit and is abandoned. These high lifting costs are not incurred when the oil is all gotten out in a short time. It is also well to take into consideration labor and maintenance costs of a pumping well over a period of years as compared with a rapid and more or less complete flushing out of the sand in the well's first year.

It is not claimed by engineers that the gas-lift well will produce its rapid outpouring of oil at a much lower cost than the pumping well. Again, it is believed that it will be about an even break. In other words, it will cost just about as much to take all a well can produce in one year by means of gas-lift as to take it out more slowly by pumping. The principal financial advantage lies in the quick return of investment.

To equip with gas-lift at Seminole means the expenditure of about $14,000 per well, according to various engineers. One company placed it at $18,000 per well, another at $12,000, with the average somewhere near the figure first given. This includes the compressors, buildings and necessary pipe lines to deliver compressed air or gas to the wells. The amount varies, of course, with the type of compressing equipment used, and there is also considerable variation in the class and finish of buildings erected for the purpose. The company earning $18,000 as its per-well gas-lift installation costs based it on the use of two 80-h. p compressors to each well.

Cost of installing gas-lift varies

greatly also according to number of wells to be handled from a central plant. If only one well is to be equipped, its costs will be much greater than the per-well costs where a number of wells are to be flowed from one plant. One company with eight wells on air-lift on one lease has $72,000 invested in the permanent compressor plant, or only $9,000 per well, an exceptionally low figure. This plant consists of four 180-h. p. compressors. On another lease, with only three wells, the same company has $36,000 invested in its air-lift plant.

Several people have told the writer that a fair estimate of development costs at Seminole can be reached by charging $100,000 to each well. Others to whom this figure was mentioned found no cause to quarrel with it and said it sounded about right. This is arrived at by assigning $70,000 as cost of drilling the well, $14,000 for gas-lift equipment, $10,000 for tankage, assuming 5,000 barrels of tankage for each well, and leaving $6,000 for gas and water lines, employes' houses, lease structures of various kinds, and all other material and equipment used on the lease, as well as equipping the wells for pumping, if they are to be pumped. This does not include cost of large storage tanks and pipe lines to convey oil to them, an additional burden that all Seminole operators have had to carry.

Using that figure, and applying it to the 507 wells now in the field, it has cost $50,700,000 to bring Seminole to its present development. It has produced to date about 54,750,000 barrels of crude. If the district is to make practically all its oil in a couple of years or less, as the gas-lift men seem to think it will, it is evident that the final balance sheet on Seminole is not going to show any very great profit—in spite of the popular idea that Seminole production is a veritable goldmine for those who own it.

* * *

TULSA, June 11.—Oklahoma production was virtually stationary this week, averaging 750,340 barrels daily as compared with the all-time peak of 751,070 barrels last week. After getting up to its peak of 373,182 barrels June 4, the Seminole district fell considerably for several days, but began to increase again late this week. The Bowlegs field, now the largest of the four pools in the district, produced 146,856 barrels June 4, but declined 10,000 in the following four days. With new wells drilled in and older wells placed on air-lift, its production climbed again, until today it was making 144,500 barrels.

Bowlegs may now reach its peak at about the time that many wells at Earlsboro begin to reach the sand.

The wells at Earlsboro are in the territory Umpire Ray M. Collins ordered held back to 1,000 barrels to each 40 acres in one area and 2,000 barrels to 40 acres in another.

Seminole proper declined only 4,700 barrels this week and 4,300 barrels the week before. This compares with its average decline of about 15,000 barrels a week in April and the first three weeks of May. Seminole proper now making 118,671 barrels from 295 wells, is producing just what it produced Dec. 29, 1926, from 97 wells. It reached a peak of 263,000 barrels early in March, and has been declining steadily since.

Mid-Continent Petroleum Corp. drilled in its No. 3 Baker, in the Bowlegs field, for 1,300 barrels in the "second Wilcox" or lower pay from 4080 to 4085 feet. This well is in NWc SW SE of 10-8-6.

Independent Oil & Gas Co. made its bow as a Bowlegs producer in its No. 1 Coker, NEc SE NE of 21-8-6, at the south west edge of the field. This well is in the Wilcox at 4268 feet total depth and swabbed 430 barrels in 12 hours after a 10-quart shot. It is being put on air-lift. Marland and Independent have a 50-50 interest in this 40-acre lease.

Pure Oil Co.'s No. 8 Reed, NWc NW SE of 14-8-6, was put on air-lift at total depth of 4183 feet and made 3,025 barrels in the ensuing 24 hours. The company already had nine wells on this farm, producing 10,071 barrels daily.

A new entry in the list of companies making 10,000 barrels or more daily in the Seminole district is the Atlantic Oil Producing Co., which has six wells making 10,311 barrels daily in Bowlegs. Shaffer Oil & Refining Co. is about to join the ranks of Bowlegs producers with its 40-acre Lacy lease, comprising the SE SW of 14-8-6. This company's No. 4, in the SWc of the lease, is drilling at 4218 feet in the Wilcox sand topped at 4210, and has 3,000 feet of oil in the hole. It is drilling three other wells on the property, all nearing the sand.

Marland Oil Co. No. 1 Chambers, Wilcox sand discovery in the Thomas district, Kay county, is still making 3,580 barrels at three weeks oil, and is partly pinched in. Four wells are drilling in the vicinity of this well, and a fifth is rigging up.

Col. Stewart is Made Doctor of Laws

CHICAGO, June 10.—Col. Robert W. Stewart, chairman, Standard Oil Co. of Indiana, on June 8, was awarded the honorary degree of doctor of laws by Coe College, Cedar Rapids, Iowa, from which he was graduated in 1886. Col. Stewart, Mrs. Stewart and their son Jack motored to Cedar Rapids for the presentation. Col. Stewart received his bachelor's degree in law from Yale.

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Write for descriptive Bulletin No. 30

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West of the Mississippi River

FRICK REID SUPPLY CO.
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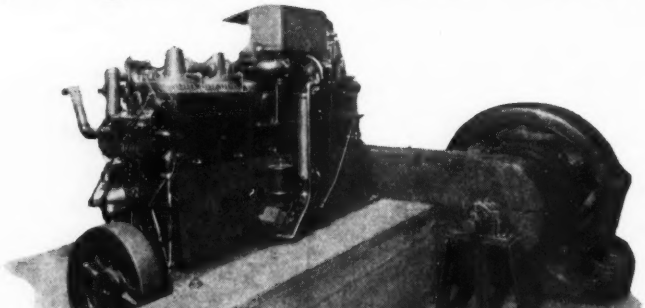
A BARGAIN
for generator and motor



For sale cheap this Crocker Wheeler generator and standard open base marine motor shown above. The generator: three wire; 125 to 250 volts; 185 to 740 amperes; 50 r.p.m.; size 10,900; type CCD, and 200 horse power.

Motor is 6 cylinder, 10-inch bore, 11 inch stroke, 125 h.p. at 450 r.p.m., Standard Motor Construction Co., chain driven with a single breaker switchboard.

Motor or Generator can be purchased separately.

Chicago Tribune
Tribune Tower, Chicago

Oil Price Handbook

RECENT crude and tankwagon price changes have caused many an oil man to study prices prevailing a year ago at this time.

What was Mid-Continent crude a year ago today? Or, what was 58-60 U. S. Motor gasoline in Oklahoma? Or, the tankwagon price of gasoline a year ago? These are some of the questions you are asking yourself right now.

You can get the answers most conveniently, rapidly and accurately in the OIL PRICE HANDBOOK for 1926. It contains the refinery, tankwagon, crude prices and export markets for the entire year 1926 as published in the weekly issues of National Petroleum News. 146 pages, cloth bound, marginal index—price $5. Send for your copy *today*.

NATIONAL PETROLEUM NEWS 812 Huron Road Cleveland, Ohio

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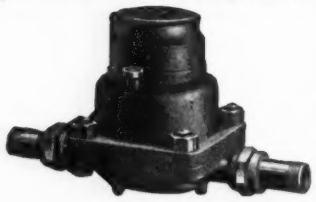

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Frick-Reid Opens New Tulsa Office

TULSA, June 11.—Friday night, June 24, from 7 to 10, Frick-Reid Supply Co. will hold open house for its friends, giving them opportunity to inspect its new general office building, into which it has moved during the past week. Some sort of celebration is in order for this occasion, as it marks Frick-Reid's first move in 18 years, it having occupied space in the Drew building since 1909. Tulsa has nearly trebled its population in those years, and very few firms or individuals have "staid put" through that period of growth.

The new building is on the company's property at Trenton av. and the Frisco tracks, adjoining its Tulsa central warehouse. It is constructed of concrete and brick, with steel casement windows, and fireproof throughout. Among its features are unusually high ceilings and a 6-foot air loft above the second floor, assuring plenty of light and complete ventilation. A vault for storage of valuable books and papers extends from the basement through both office floors. The building cost about $60,000.

The company now has some 90 employes in its Tulsa offices. In the event that it becomes necessary to provide quarters still larger than those available in the new building, there is room to extend it in two directions. In a small building adjoining the main office, the company is installing a cafeteria for convenience of the employes. Several bus lines run within two blocks of the office, and it is possible that the route of one of them may be changed so as to pass the new building. The company also will run a seven-passenger automobile on regular schedule between the office and the downtown section of Tulsa. This car will follow the same route each trip, passing all principal office buildings and hotels. This service will be available for friends and customers, and, according to John L. Shakeley, general sales manager, even newspaper men will be allowed to take a free ride now and then.

New Marland Stations

PONCA CITY, June 11.—The Marland Refining Co. will open nine new bulk stations and two new service stations during June. The service stations will be at Canadian, Tex., and Lafayette, Ind. The bulk stations will be at Painview and Abilene, Tex., Purcell, Bristow and Snyder, Okla., Brookfield and Greenburg, Mo., and Cottonwood Falls, Kans.

TULSA—E. DeGolyer, president of the Amerada Petroleum Corp., visited the Tulsa offices of the company during the week ended June 11.

Bureau of Mines Has Developed Method To Find Refining Value of Crude

By N. A. C. Smith

Superintendent Bureau of Mines Experiment Station, Bartlesville, Okla.

Part 1

DURING the past six years, the Bureau of Mines has made and published several hundred analyses of typical crude oils and has developed a system of interpreting the analyses and of classifying crudes. This system is presented herewith. It is apparently adequate for classifying crude oils into four main groups and has also been found very convenient in studying the geological relationships between crude oils, and the probable refinery yields of valuable products from them.

Crude petroleum is known to be a very complex substance. An analytical statement of its properties must, therefore, consist of two distinct parts, first, the report of the results of the determinations made by the analyst in the laboratory, second, the proper arrangement, classification and interpretation of these results so that the analysis, as a whole, will indicate the meaning and the relative importance of the essential characteristics of the oil.

This type of analytical statement is useful in judging many raw materials and manufactured products. To say, for example, that a lubricating oil has a Saybolt Universal viscosity of 300 seconds at 100° F. means little in itself. It is only when other characteristics of the oil are studied in conjunction with the viscosity that a true picture of the oil in question can be obtained. To the experienced refiner of lubricating oils a statement giving simply the viscosity, gravity and color, and the flash and pour points of the oil will often be sufficient, as he can supply from previous experience his own interpretation of the data furnished by the analyst.

Organic materials, such as crude petroleum, on account of their great complexity, require especially careful interpretation if the laboratory results are not to be actually misleading. For example the percentage of "gasoline" in various crude oils is stated in many of the standard text books on petroleum. Unless one knows, however, just what each particular author means by the term "gasoline" it is impossible to predict the yield of motor oil from these published analyses.

A Measuring Stick for Crude Oil

THE accompanying article, published as a report of the Bureau of Mines, is an exceedingly valuable piece of work from the standpoint of the refiner and its seems likely that it may become a standard method of finding the value of crude oil.

Of course many refiners have satisfactory methods of their own for appraising crude but a good many others have obtained supplies of crude and been much disappointed with the results they obtained from it in the refinery as compared with the results shown by preliminary tests.

In this installment, some of the things that have been learned in six years of work on this subject are set forth by Mr. Smith and his method is introduced. In Part 2, to be published in the June 22 issue, the calculation rules are explained by their application to specific cases.

Hempel Distillation;—Bureau of Mines Modification

THE method of analysis adopted by the Bureau of Mines for its surveys of typical crude petroleums, including the modified Hempel type apparatus and accessories used are described by Dean[2], Hill, Smith and Jacobs. In brief, the method involves the distillation of a sample of crude oil under carefully controlled conditions that can be duplicated readily, and the subsequent examination of the series of successive fractions thus obtained. In addition, the gravity, color, viscosity, pour point and the sulphur content of the crude itself are determined.

Typical Analyses

IN TABLE 1 are presented analyses of four crudes, each of which may be considered typical of its class. The data tabulated in the body of each analysis is obtained directly by laboratory observation, as described in Bulletin 207. The figures given in the "*approximate summary*" are derived by calculation and interpretation. Before discussing the "approximate summary" however, it is advisable to compare the analytical data presented in the four analyses.

The "Base" of a Crude Oil

In describing a crude oil, reference is often made to its supposed "base." The writer has talked with many oil producers and refiners and has come to the conclusion that the word "base" is used much as it is in pharmaceutical work. For example, the "base" or "basis" of an ointment or salve is the fatty material (lard petroleum, lanolin, etc.) used as a vehicle or carrier for the active medicinal principles. Apparently many of the pioneers in the petroleum industry conceived of crude oil as being similar in nature to these medicinal products, in that it consisted of a semisolid nonvolatile "base" and a volatile portion which could be distilled off to make gasoline, kerosene, etc.

MANY crude oils when chilled slowly will deposit a waxy material (paraffin) and this fact may have been one of the reasons why these oils were spoken of as having a "paraffin base."

Historically, it happened that the oils first discovered in this country were almost all of this kind and it was only when the oil industry developed in California and along the Gulf coast that oils were found which contained no wax but which apparently did contain asphaltic material. These oils were accordingly known as "asphalt base" oils. The use of this term, however, seems unfortunate as the better grade crudes of this type contain little of any asphalt. This fact has apparently been recognized in the petroleum industry and the more descriptive term "naphthene base" is frequently used in place of the term "asphalt base."

Oils that cannot be assigned to either the "paraffin" or "naphthene" groups

[2]Dean, E. W., Hill, H. H., Smith, N. A. C., Jacobs, W. A. The Analytical Distillation of Petroleum, Bureau of Mines Bull. 207.

are usually classed as "intermediate base" crudes. These 'intermediate-base" oils in general resemble "paraffin-base" crudes much more than they do "naphthene-base" crudes. It is, however, the belief of the writer that a fourth type of crude exists that resembles a true naphthene-base crude except that it contains a small amount of waxy material. To distinguish this type of oil from an intermediate base oil it has been given the name "hybrid-base" crude.

From a strictly scientific standpoint the analogy between a crude oil and a medicinal ointment is without foundation. However, the terms "paraffin base," "intermediate base," and "naphthene base" have become fairly well established in the petroleum industry, and the classification is useful for many purposes.

ANALYSES A, B, and D in Table 1 are respectively typical of what the petroleum industry knows as "paraffin - base," "intermediate - base" and "naphthene-base" (asphalt-base) crudes. Analysis C is a typical "hybrid-base" oil. These four analyses are selected from many similar ones available. In general quality the four oils are perhaps a little above the average production for each type.

In Figure 1 the A. P. I. gravities of the corresponding distillation fractions of the four typical crudes A, B, C, and D, are compared. It will be noted that fractions of the same boiling points of the paraffin base crude are lighter than those of the intermediate base crude. The fractions from the hybrid base crude are still heavier and those from the naphthene base crude are the heaviest of all.

The viscosities, Figure 2, of the vacuum fractions also show an interesting relationship. The corresponding fractions from paraffin-base crude are much less viscous than those of the other crudes and in general the crudes with the heaviest fractions have the most viscous distillates.

OILS C and D are deficient in low-boiling fractions. This is not unusual in crudes of these types, although oils are found which do contain considerable gasoline. It is interesting to note that when gasoline is present the gravity curves usually correspond with curves C and D as indicated by the dotted portions of Figure 1.

Both figures 1 and 2 indicate that paraffin and intermediate base oils are similar in general character, also that hybrid and naphthene base oils are much alike. Many inferences can be drawn from this fact as to the geological and chemical relationships between crude oils. The author, however, has not enough data available at present to venture far into these interesting fields of speculation.

Determining the Base of a Crude Oil

MANY methods may be used to determine the "base" of a crude oil from the analytical data. It is apparent that a "gravity" curve can be prepared from the analysis and compared with a set of typical curves as shown in Figure 1. A simpler method is the following:

I—Note the A. P. I. gravity of "key fraction No. 1," that is, the fraction distilling between 250 and 275° C (482-527°F.) *at atmosphere pressure.* If this gravity is 40° A. P. I. or lighter, the oil can be considered definitely to have a paraffin base. If this gravity is 33° A. P. I. or heavier the oil has either a naphthene or a hybrid base. If it is between 33 and 40 the oil has an intermediate base.

II—Note the "cloud point" of "key fraction No. 2," that is, the fraction distilling between 275 and 300°C (527-572°F) at 40 *mm, absolute pressure.* If this cloud point is reported as being below 5° F., it indicates that wax is absent and that the oil has a naphthene base. If, however, the cloud point is above 5° F. it indicates the

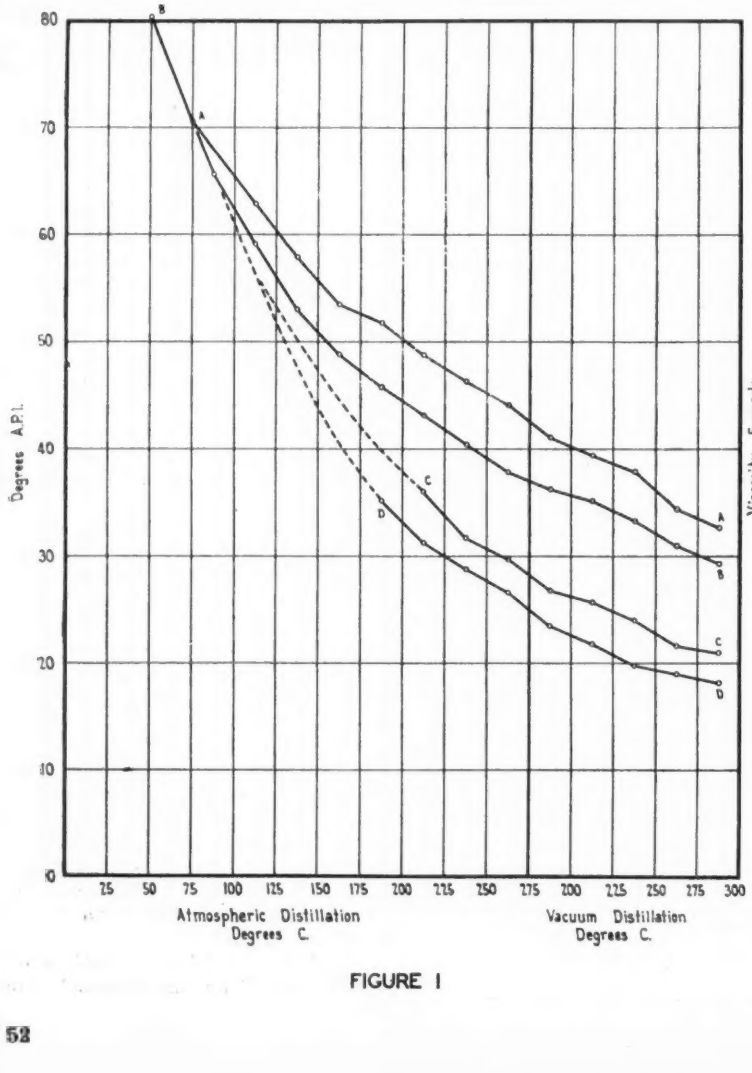

FIGURE 1

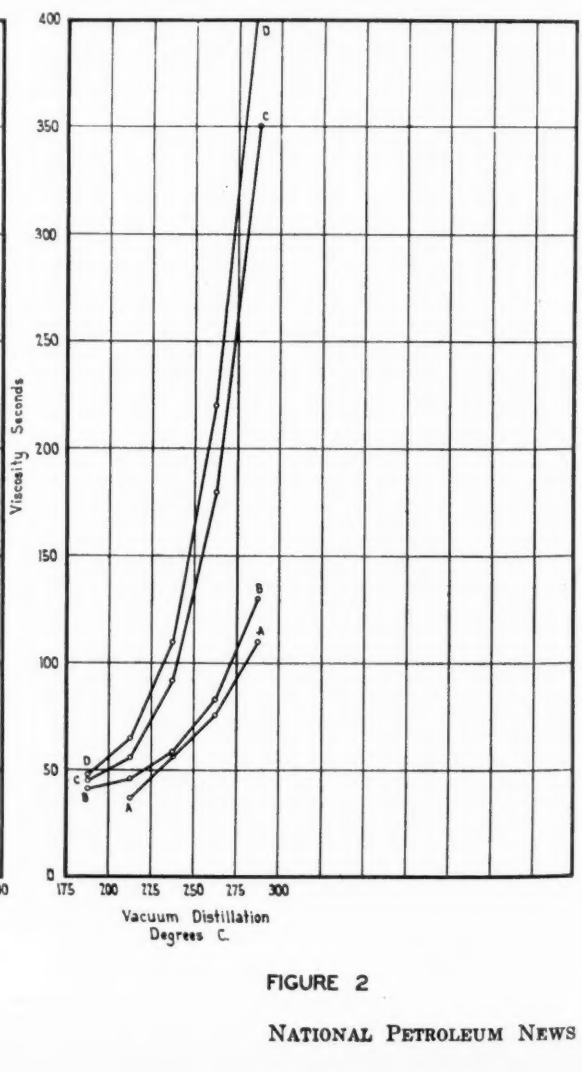

FIGURE 2

presence of wax and that the oil may have a paraffin, an intermediate, or a hybrid base.

As was stated in the introduction the Bureau of Mines has examined several hundred crude oil samples and these samples represent petroleum from almost all of the important producing fields in the world and of practically every geological age. The method of classifying crudes given above has been successful in nearly every instance. It has been found, for example, that if key fraction No. 1 shows the crude to be "paraffin" or "intermediate" in character, the other fractions all indicate the same to be true. The vacuum fractions invariably contain wax and the gravity ranges are surprisingly uniform. In the same way if the gravity of Key Fraction No. 1 is

Table 1

Analysis of Typical Crude Oils

Sample A—Paraffin Base Crude

West Virginia — Marshall County
Specific gravity, 0.804 — A. P. I. gravity, 44.5°
Per cent sulfur, 0.10 — Color by transmitted light Red (No. 6 N. P. A.)

Saybolt Universal viscosity at 70° F. 39 Sec.
Saybolt Universal viscosity at 100° F. 37 Sec. Pour point, below 5° F.
DISTILLATION, bureau of mines Hempel Method—8 Pt by up & lc
Distillation at 740 mm. pressure (atmospheric). First drop 40° C. (104° F.)

Temperature ° C.	Per Cent	° A. P. I. Gravity	Viscosity	Cloud Point ° F.	Temperature ° F.
Up to 50	....	.....	.....	.....	Up to 122
50 to 75	1.2	.....	.....	.....	122 to 167
75 to 100	3.8	70.6	.....	.....	167 to 212
100 to 125	8.8	62.9	.....	.....	212 to 257
125 to 150	7.9	57.9	.....	.....	257 to 302
150 to 175	7.7	53.5	.....	.....	302 to 347
175 to 200	6.4	51.8	.....	.....	347 to 392
200 to 225	7.9	48.8	.....	.....	392 to 437
225 to 250	5.9	46.3	.....	.....	437 to 482
250 to 275(1)	7.0	44.1(1)	.....	.....	482 to 527
Vacuum distillation at 40 mm.					
Up to 200	4.9	41.1	*	20	Up to 392
200 to 225	5.7	39.4	37	45	392 to 437
225 to 250	5.8	37.8	57	60	437 to 482
250 to 275	5.4	34.4	76	75	482 to 527
275 to 300(2)	4.8	32.7(2)	110	90(2)	527 to 572

Carbon residue of residuum 1.3%.
(1) Key fraction No. 1.
*Below 30 seconds.
(2) Key fraction No. 2.

Approximate Summary (Calculated)

	Per cent	Gr. ° A.P.I.	Viscosity
Light gasoline	5.0	70.6	.....
Total gasoline and naphtha	35.8	58.7	.....
Kerosene distillate	20.8	46.5	.....
Gas oil	11.6	40.0	.....
Nonviscous lubricating distillate	11.0	38.4-33.2	50-100
Medium lubricating distillate	4.0	33.2-31.9	100-200
Viscous lubricating distillate	.....	.....	Above 200
Total distillate	83.2	.....	.....
Distillation loss (est.)	1.0	.....	.....
Residuum (est.)	15.8	.....	.....
Carbon residue of crude (est.)	0.2	.....	.....

Sample B—Intermediate Base Crude

Wyoming — Salt Creek Field — Natrona County
Specific gravity, 0.841 — A. P. I. Gravity, 36.8°
Per cent sulfur, 0.18 — Color by reflected light, Dark green.

Saybolt Universal viscosity at 70° F. 95 Sec.
Saybolt Universal viscosity at 100° F. 50 Sec. Pour point, 55° F.

Distillation, Bureau of Mines Hempel Method

Distillation at 746 mm. pressure (atmospheric). First drop 25° C.(77° F.)

Temperature ° C.	Per Cent	° A. P. I. Gravity	Viscosity	Cloud Point ° F.	Temperature ° F.
Up to 50	1.8	.....	.....	.....	Up to 122
50 to 75	1.7	89.6	.....	.....	122 to 167
75 to 100	4.7	65.6	.....	.....	167 to 212
100 to 125	6.2	58.2	.....	.....	212 to 257
125 to 150	5.3	53.0	.....	.....	257 to 302
150 to 175	5.5	48.8	.....	.....	302 to 347
175 to 200	4.1	45.8	.....	.....	347 to 392
200 to 225	4.6	43.2	.....	.....	392 to 437
225 to 250	5.3	40.4	.....	.....	437 to 482
250 to 275	5.8(1)	37.8(1)	.....	.....	482 to 527
Vacuum distillation at 40 mm.					
Up to 200	4.9	36.2	41	20	Up to 392
200 to 225	5.9	35.2	46	40	392 to 437
225 to 250	5.6	33.2	59	65	437 to 482
250 to 275	5.5	31.0	83	75	482 to 527
275 to 300	5.8(2)	29.3(2)	130	90(2)	527 to 572

Carbon residue of residuum 6.1%
(1) Key fraction No. 1
(2) Key fraction No. 2

Approximate Summary (Calculated)

	Per cent	Gr. ° A.P.I.	Viscosity
Light gasoline	8.2	71.8	.....
Total gasoline and naphtha	29.3	57.2	.....
Kerosene distillate	9.9	41.7	.....
Gas oil	15.4	36.4	.....
Nonviscous lubricating distillate	11.6	34.6-30.4	50-100
Medium lubricating distillate	6.5	30.4-28.6	100-200
Viscous lubricating distillate	.....	.....	Above 200
Total distillate	72.7	.....	.....
Distillation loss (est.)	1.0	.....	.....
Residuum (est.)	26.3	.....	.....
Carbon residue of crude (est.)	1.6	.....	.....

Sample C—Hybrid Base Crude

Texas — Orange Field — Orange County
Specific gravity, 0.912 — A. P. I. Gravity, 23.7°
Per cent sulfur, 0.45 — Color by reflected light, Brownish black
Saybolt Universal viscosity at 70° F. 350 Sec. — Pour point, below 5° F.
Saybolt Universal viscosity at 100° F. 155 Sec.

Distillation, Bureau of Mines Hempel Method

Distillation at 738 mm. pressure. (atmospheric) First drop 161° C (322° F)

Temperature ° C.	Per Cent	° A. P. I. Gravity	Viscosity	Cloud Point ° F.	Temperature ° F.
Up to 50	.....	.....	.....	.....	Up to 122
50 to 75	.....	.....	.....	.....	122 to 167
75 to 100	.....	.....	.....	.....	167 to 212
100 to 125	.....	.....	.....	.....	212 to 257
125 to 150	.....	.....	.....	.....	257 to 302
150 to 175	.....	.....	.....	.....	302 to 347
175 to 200	.....	.....	.....	.....	347 to 392
200 to 225	7.7	36.0	.....	.....	392 to 437
225 to 250	6.8	31.7	.....	.....	437 to 482
250 to 275(1)	10.0	29.7(1)	.....	.....	482 to 527
Vacuum distillation at 40 mm.					
Up to 200	6.6	26.8	45	25	Up to 392
200 to 225	9.4	25.7	56	35	392 to 437
225 to 250	8.3	24.0	92	55	437 to 482
250 to 275	8.5	21.6	180	70	482 to 527
275 to 300(2)	5.9	21.0(2)	350	100(2)	527 to 572

Carbon residue of residuum—8.0%.
(1) Key fraction No. 1.
(2) Key fraction No. 2.

Approximate Summary (Calculated)

	Per cent	° A.P.I. Gr.	Viscosity
Light gasoline	.....	.....	.....
Total gasoline and naphtha	.....	.....	.....
Kerosene distillate	.....	.....	.....
Gas oil	31.5	31.0	.....
Nonviscous lubricating distillate	13.8	26.4-23.8	50-100
Medium lubricating distillate	8.5	23.8-21.6	100-200
Viscous lubricating distillate	9.4	21.6-20.7	Above 200
Total distillate	63.2	.....	.....
Distillation loss (est.)	1.0	.....	.....
Residuum (est.)	35.8	.....	.....
Carbon residue of crude (est.)	2.9	.....	.....

Sample D—Naphthene Base Crude

Texas — Damon Mound Field — Brazoria County
Specific gravity, 0.923 — A. P. I. Gravity, 21.8°
Per cent sulphur, 0.28 — Color by reflected light
Saybolt Universal viscosity at 70° F. 225 Sec. — Brownish green
Saybolt Universal viscosity at 100° F. 110 Sec. — Pour point, below 5° F

Distillation, Bureau of Mines Hempel Method

Distillation at 742 mm. pressure. (atmospheric) First drop 160° C (320° F)

Temperature ° C.	Per Cent	° A. P. I. Gravity	Viscosity	Cloud Point ° F.	Temperature ° F.
Up to 50	.....	.....	.....	.....	Up to 122
50 to 75	.....	.....	.....	.....	122 to 167
75 to 100	.....	.....	.....	.....	167 to 212
100 to 125	.....	.....	.....	.....	212 to 257
125 to 150	.....	.....	.....	.....	257 to 302
150 to 175	.....	.....	.....	.....	302 to 347
175 to 200	3.0	35.2	.....	.....	347 to 392
200 to 225	6.8	31.3	.....	.....	392 to 437
225 to 250	9.2	28.8	.....	.....	437 to 482
250 to 275(1)	11.9	26.6(1)	.....	.....	482 to 527
Vacuum distillation at 40 mm.					
Up to 200	9.1	23.5	48	Below 5	Up to 392
200 to 225	9.5	21.8	65	Below 5	392 to 437
225 to 250	8.0	19.8	110	Below 5	437 to 482
250 to 275	8.5	19.0	220	Below 5	482 to 527
275 to 300(2)	8.3	18.2(2)	*	Below 5(2)	527 to 572

Carbon residue of residuum—3.1%.
*Above 400 seconds Saybolt at 100° F.
(1) Key fraction No. 1.
(2) Key fraction No. 2.

Approximate Summary (Calculated)

	Per cent	° A.P.I. Gr.	Viscosity
Light gasoline	.....	.....	.....
Total gasoline and naphtha	.....	.....	.....
Kerosene distillate	.....	.....	.....
Gas oil	36.5	28.2	.....
Nonviscous lubricating distillate	15.2	23.3-20.3	50-100
Medium lubricating distillate	8.6	20.3-19.2	100-200
Viscous lubricating distillate	14.0	19.2-17.8	Above 200
Total distillate	74.3	.....	.....
Distillation loss (est.)	1.0	.....	.....
Residuum (est.)	24.7	.....	.....
Carbon residue of crude (est.)	.8	.....	.....

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below 33 the oil is either naphthenic or hybrid. The absence or presence of wax in key fraction No. 2 decides which it is.

Freak Oils

THE majority of crude oils can easily be assigned to one or another of these four classes, but, as is well known, many oils are found which lack either the light or the heavy ends of a normal crude. For example, the oil from the Cat Creek Field in Montana and that from Hog Back Field in New Mexico contain only small percentages of high boiling material. The method of classification however. can easily be applied to these oils as key fraction No. 1 is present in both cases. The Cat Creek oil has an intermediate base and the Hog Back oil a paraffin base according to this method.

The Hog Back field is not far from geological formations known to be of volcanic origin, and it seems probable therefore that this light oil is the volatile portion of a crude oil which has been distilled in the ground by the heat from volcanic material, in other words, it might be considered as a "natural distillate."

These oils which lack the nonvolatile fractions are found in many parts of the world but the production is generally small. They may belong to any of the four classes. Another class of "freak" oils are the asphaltic seepages and other heavy oils from which the lighter fractions have apparently evaporated into the atmosphere. These oils are hard to classify definitely, as key fraction No. 1 is usually missing. A study of the gravity and viscosity curves of the vacuum distillates and the presence or absence of wax can usually be relied upon to assign these crudes to the proper class.

Miscellaneous Analytical

IT IS often assumed that the "gravity" of a crude oil is a fair measure of its character. This is true to a limited extent—for example, in many of the producing districts of this country gravity is sufficiently descriptive to be used as a basis for crude-oil prices. However, the gravity of a naphthene-base crude is much heavier than that of an intermediate or paraffin base crude of the same general quality, hence gravity taken alone is not sufficient to establish the identity of a crude oil.

The physical appearance of a crude is indicated in the analysis not only by the gravity, but by the color, the pour point, and the viscosity. The color of a crude oil may range from a very light yellow up to a brilliant brownish black. For oils that are transparent when viewed in a four-ounce bottle by transmitted light, the Bureau uses the "National Petroleum Association" color scale. Most oils, however, are opaque when viewed in this way and the color by reflected light is reported according to the following system. If the oil is clear in color it is reported as "green" "dark green," or "greenish black," if it has a brownish or muddy appearance it is reported as "brownish green," or "brownish black."

The pour point of a crude indicates to some extent how it will behave in transportation and storage. Oils with pour points above 50° F. are likely to cause difficulty by solidifying during the winter in storage tanks and pipe lines. The viscosity of oil also indicates its general character, as oils which are deficient in light fractions or which contain large amounts of asphalt in solution have high viscosities.

The sulphur content of a crude oil is very important in discussing its chemical relationships and its refining value, but the base of the crude must also be considered in this connection. For instance in a naphthene-base crude a content of 0.3 per cent of sulfur would not be considered unduly high, whereas the same percentage in a paraffin-base crude would make it a "high-sulfur" crude. The amount of sulfur present in a crude oil is apparently somewhat related to the amount of asphalt in solution, oils containing the greatest amount of asphalt having the highest sulfur content.

After the distillation of a crude is completed a certain amount of residuum is left in the distillation flask. The "carbon residue" or "fixed carbon" in this residuum is of interest as it indicates roughly the presence or absence of asphalt. Oils with high-carbon residues are usually considered less desirable from the refining standpoint. It should also be noted that high-sulfur crudes usually have high-carbon residue contents.

In making an analysis of a sample of crude oil "as received at the laboratory" the percentages of free water and emulsified water should be recorded. The percentage of water present is of interest to oil producers and purchasers, but the presence of water in itself has no bearing on the character of a crude oil.

Approximate Summary

IT WILL be noted that very little has been said in the foregoing discussion about the actual percentages of different fractions present in the oil. In classifying a crude oil the actual percentages of the gasoline fractions (for example) are of relatively little importance. It is the chemical nature of these fractions rather than their percentages that determine the basic character of the crude. However, in studying the value of the crude for refining, the percentage composition becomes very important and a second system of interpretation of crude oil analyses in terms of commercial products is therefore necessary.

The modified Hempel distillation

Warning! to all who manufacture Ford automobile oils

Are you unknowingly laying yourself open to litigation?

IT may be news to the majority of oil companies that a patent has been granted which *covers the use of metalic soaps in lubricating oils* for Ford automobile use. This is the Sorensen patent No. 1,414,311, issued on April 25th, 1922 to Edson L. Cannon, of Cleveland Heights, Ohio.

This patent is now being rigorously enforced. Since ignorance of the existence of this patent would not protect you against legal action nor be accepted as an excuse in the law courts, it is obviously to the interest of all oil companies to watch that in compounding their oils, they use only those bases which are licensed under the Sorensen patent.

Some of the largest oil companies have investigated the validity of this patent and have found it good business to either take licenses under the patent or purchase licensed bases, since the cost of patent litigation runs up into many thousands of dollars, and this is a matter which most companies seek to avoid.

Play safe by purchasing

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The owners of the Sorensen patent are strenuously searching for infringements and it is no secret that they are obtaining samples of all oils possible and analyzing them with a view to determining whether infringement of their patents is present or not. The presence of metalic soaps can be determined by a very simple test as any chemist will tell you.

This patent affects many companies who do not realize that they are guilty of infringement. So, when you buy oil bases the old saying, "Caveat Emptor," (Let the buyer beware,) applies very emphatically.

By using Viscogen Jelly, you will not be culpable of "bootlegging" your Ford oils, either intentionally or otherwise. Viscogen Jelly is a first-class base for non-chatter oil for Fords. The market for this type of oil is selfevident when the vast number of Fords in daily use is considered. The compounding is a very simple process—you simply mix Viscogen Jelly with any good grade of automobile oil. The only equipment you need is a kettle.

It is well to remember, also, that a patented product automatically carries with it the evidence of a product that has more than ordinary merit. Otherwise, such a product would not be worth patenting.

We are also in a position to furnish Aluminum Stearate and other metallic soaps which are frequently used for the same purpose. Furthermore, we have the authority to negotiate special forms of licenses under the Sorensen patents.

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method employed by the Bureau of Mines for the analysis of crude petroleum was not developed with the idea of obtaining figures that parallel the results of actual refinery operations. Refinery practice has not been and probably can not be standardized. The chief value of the method lies in the fact that it not only permits an adequate comparison of different crude oils but it also furnishes the basis for a rough and ready interpretation in terms of commercial products. This approximate summary is calculated in a somewhat arbitrary manner by means of the following rules:

Rules for calculating approximate

Summary

1. The (sum) total percentage of all fractions distilling at atmospheric pressure below 100° C. (212° F.) is reported as the percentage of *light gasoline.* This figure approximates the yield of gasoline with a maximum boiling point of 125° C (257° F.).

2. The (sum) total percentage of all fractions distilling at atmospheric pressure below 200° C. (392° F.) is reported as the total percentage of *gasoline and naphtha* if no fraction in this range has a gravity heavier than 0.825 (40.0° A. P. I.). This figure approximates the yield of gasoline or naphtha with a maximum boiling point of 215° C (419° F.). (If fractions boiling below 200° C. have gravities heavier than 0.825 they are classed as *gas oil.*)

3. The (sum) total percentage of all fractions distilling at atmospheric pressure above 200° C. (392° F.) but below 275° C. (527° F.) that have gravities of 0.825 (40.0° A. P. I.) or lighter, is reported as *kerosene distillate.*

4. The (sum) total percentage of all fractions distilling at atmospheric pressure below 275° C. (527° F.) *that have gravities heavier than* 0.825 (40° *A. P. I.*) plus all vacuum distillate with a viscosity less than 50 seconds (Saybolt Universal at 100° F.) is reported as *gas oil.*

5. Lubricating distillates are classified as follows: Distillate with a viscosity range (Saybolt Universal at 100° F.) between 50 seconds and 100 seconds, is reported as *nonviscous lubricating distillate.* Distillate with viscosity between 100 seconds and 200 seconds is reported as *medium lubricating distillate.* Distillate with viscosity above 200 is reported as *viscous lubricating distillate.* The percentages of the lubricating distillates are calculated by plotting the gravities and viscosities of the individual fractions separately against "volume sum percentages," and noting where the 50 second, 100 second, and 200 second points on the viscosity curve, intercept the "volume sum percentage" coordinate. The gravities corresponding to these intercepts give the gravity ranges of the distillates.

If Hard Put For a Job, Try Checking East Texas Geophysical Results

By Paul Wagner

N. P. N. STAFF WRITER

TWO geo-physicists for competing oil companies were swabbing each other for information. One of them had denied knowledge of a new salt dome found by use of either the seismograph or the torsion balance. The other had laughingly accused him of "spoofing."

"Anyhow," same the reply, "it's good to have something worth while to lie about."

The cameraderie that prevails in the field branch of the petroleum industry prevents men deliberately lying to each other, but the inhibition does not extend far enough to prevent concealment.

A geo-physicist may find it convenient to know nothing about his company's land policy in an area where he is working and, similarly, the operating force may pay no attention to leasehold acquisitions until orders are sent out to make locations and drill tests.

The job of scouting country where geo-physical instruments are being used for sub-surface mapping becomes, therefore, a problem. The movements of seismograph outfits may be checked fairly readily, because discharges of dynamite are made to set up vibrations which are measured against each other on detectors, or impulse recorders.

Results obtained by "shooting" cannot, however, be found out by usual methods of scouting. A glint of the eye may disclose something when a scout meets a member of a seismograph crew in a hotel at night, or it is possible that a torsion balance chief may not be able always to maintain his "poker face." In parts of west Texas, where the magnetometer is now being used, it is even harder to ascertain what a competing company has found through use of instruments.

READERS of NATIONAL PETROLEUM NEWS are familiar with the torsion balance and the seismograph, which embrace, respectively, gravitational and wave transmission principles. The magnetometer, which may be carried anywhere and which is set up on a tripod, measures the relative depth of the denser rocks underground on a magnetic principle. Briefly, it is somewhat similar to the dip-needle used for years in hard mining practice.

For the purposes of this article and beyond the comment already made with regard to the magnetometer, the discussion of geo-physical instruments will be confined to the use of the seismograph and the torsion balance. Both are being used to the exclusion of other geo-physical methods in the interior salt dome areas of east Texas, where a leasing "play" gained considerable headway after the Humble Oil & Refining Co.'s recent discovery of the Boggy Creek salt dome, along the Cherokee-Anderson county boundary.

IT HAS been next to impossible for the companies themselves to verify rumors of the discovery of submerged salt domes in the east Texas territory. At least four others have been found and mapped with instruments since the Boggy Creek discovery, but there is no verification of an equal number supposed to have been discovered.

The four domes definitely admitted to have been found by use of instruments include three in Smith county and one in Anderson county. Smith county domes are in close proximity to the towns of Tyler, Whitehouse and Bullard; and they are mainly controlled by two companies, namely, the Gulf Production Co., and the Humble Oil & Refining Co. The fourth dome, near Bethel, in northwestern Anderson county, was found by Pure Oil Co., which holds a considerable part of the acreage.

There is no verification of a fifth dome supposedly found in Freestone county, across the boundary from the salt plug mapped by the Pure at Bethel.

Amerada Petroleum Corp. is credited with the finding of a dome three-quarters of a mile northwest of the town of Troup, in Smith county, but the existence of this plug also lacks definite verification.

Two other prospects, both in Anderson county, are said not to be salt domes; although they are getting plenty of attention in connection with the activity that followed Boggy Creek. One is in the Salmon area, near the town of Elkhart, in the southern part of the county, and the other is known as the Posey saline, down the Neches river from Boggy Creek.

More explicitly, the east Texas domes or prospects figuring in leasing or development activities since Boggy Creek are located as follows:

Tylor Dome—Adjacent to Tyler, Smith county, and extending up to the northeast corner of the townsite; about 75 per cent controlled by Humble Oil & Refining Co., the remainder of the acreage being under miscellaneous ownerships.

Whitehouse Dome—Roughly two miles southwest of the town of Whitehouse, in southern Smith county, and due south of Tyler; about 98 per cent controlled by Humble Oil & Refining Co.

Bullard Dome—East of the town of Bullard, Smith county, and probably just north of the Cherokee county boundary; about 98 per cent controlled by Gulf Production Co.

Troup Dome—Prospect generally credited with being dome northwest of Troup, Smith county, and within three-quarters of mile of town of same name; mainly controlled by Amerada Petroleum Corp.

Bethel Dome—South of town of same name, in Anderson county, and within half mile of city limits. Pure Oil Co., and others, control acreage.

Salmon Prospect—Southeast of town of Elkhart, in southern Anderson county, where noticeable dips in surface beds have been mapped; not admitted to be salt dome; Gulf, Humble, Texas and Roxana companies all own leaseholds in area, the Roxana having about 2100 acres.

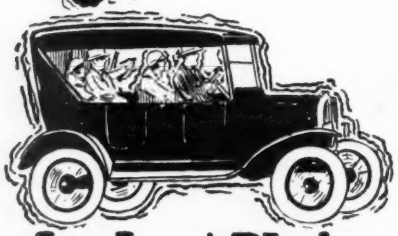
Posey Saline—On west of Neches river, in Anderson county, and due of Palestine; controlled in its entirety by Humble Oil & Refining Co., which took up acreage about time it acquired Boggy Creek block, straddling Anderson-Cherokee boundary, roughly eight miles north. Drilling to depth of 4400 feet has resulted in oil shows but no salt formation in either of three tests put down by Humble.

Freestone Prospect—A dome supposedly found across the Anderson-Freestone county boundary from the Bethel dome of Pure; no information made public as to either findings or acreage holdings.

SIX old domes in the interior of east Texas, which are thus differentiated because of surface evidence of their existence, have been known for years and prospected for oil without favorable results. These are:

Butler Dome—Near eastern corner of Freestone county, as shown by map published in NATIONAL PETROLEUM NEWS, page 53, March 30, 1927 issue; The Texas Co. owns about 75 per cent of acreage in fee simple, remainder belonging to Gulf and Humble companies; Alexander &

Ch-Chat—Chat-tering



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Lyles of Dallas own 7000 acres offside the south and west flanks of dome.

Palestine Dome—Near town of Palestine, Anderson county, where Texas, Gulf and Humble companies control most of acreage.

Keechi Dome—Northeast of Palestine dome, in Anderson county, where 10 wells have been drilled into salt core at various times and three deep flank tests were failures; The Texas Co. drilled first five wells into salt core and Humble Oil & Refining Co., operating 50-50 with Navarro Oil Co., completed five others. Offside tests on northwest flank drilled by J. S. Cosden interests and Roeser Petroleum Co., which plan further operations. Acreage on or adjacent to dome held by Sun, Texas, Pure, Navarro, Humble and Gulf, in addition to Roeser-Cosden interests.

Brooks Dome—In southwest corner of Smith county, where seven old tests were drilled into salt core. Gulf holds larger part of acreage, with Humble and Texas companies also important owners of leaseholds.

Steen Dome—Northern Smith county; Gulf owns 10,000 acres, the Texas, Humble and Magnolia companies holding scattered tracts.

Grand Saline Dome—In eastern Van Zandt county, west of Steen dome; many independent interests hold acreage on east and south flanks and Gulf owns large block on west side.

On page 80, November 24, 1926 issue of NATIONAL PETROLEUM NEWS, there was published a list of instrument-found domes previously discovered in Gulf Coastal Texas and Louisiana, to which domestic territory oil production from saline plug structures had been confined prior to the Boggy Creek discovery.

Since last November, Pure Oil Co. has found a dome by use of instruments at Lost Lake, near the Chambers-Liberty county boundary, southwest of Moss Bluff, in Texas, and a number of submerged salt plugs have been mapped in Iberville parish, Louisiana.

THE six domes in Iberville parish, which are held by various oil operating interests, are located roughly as follows:

Whitecastle Dome—in township 11, range 12 east, and in the southwest corner of the Square League.

Bayou Blue Dome—In southeast corner of township 9, range 10 east.

Bayou Henry—In southwest corner of township 8, range 10 east.

Bayou de Glase—In southeast corner of township 8, range 8 east.

Choctaw Dome—In northeast corner of township 9, range 11 east.

Darrow Dome—Also known as Belle Helene, opposite town of Donaldsonville, in township 10, range 2 east.

The only distinguishing surface features in connection with the Iberville parish domes are, in some instances, their proximity to marshes, or low ground.

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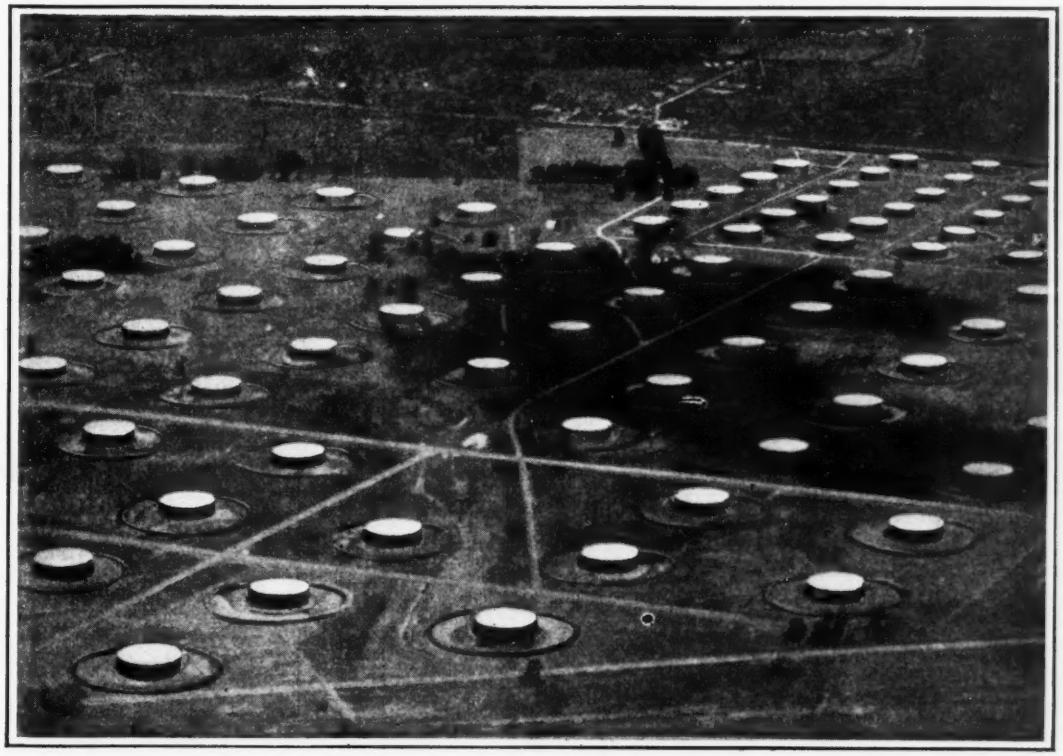

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*Patented. Other patents pending

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The Editors' Viewpoint

National Petroleum News

Many Buyers and Sellers Would Make Healthier Tank Car Markets

By Warren C. Platt, Editor

THE healthiest market for all concerned is one with many buyers and many sellers in it and every sale about the same size. Such a market represents the judgment of many minds with all operating under about the same conditions of sale and purchases.

This is the ideal to which buyers and sellers in the petroleum tank car market could well work.

At the present time the market is far from this ideal. Comparatively few refining companies are in the market each day and then only dealing in relatively few cars, in some cases very few cars. The result is, the market represents the opinions of only a few people. Maybe only a dozen men contribute their opinions to the Group 3 tank car market on U. S. Motor fuel in a day—some days even less than that.

By saying "contribute their opinions" we mean buying and selling in that market which is a contribution of opinions, yet a very large part of the output of Group 3, as well as of other refining districts, moves by contract and therefore, on the opinions, many days, of only a handful of men.

What is true of Group 3 is true of most of the other refining markets. There is a big volume of business based on those markets, but that volume is by contract. Most everybody has signed the contracts and then have gone away and forgotten to pay any attention to the markets. That is true of both the refiner, who is the seller, and the oil marketers, who is the buyer.

It has long been recognized that the healthiest market for stocks is one in which there are many sellers and many buyers, who keep a steady flow of stocks moving back and forth in the market. Then if someone dumps in say a few hundred or a few thousand shares, or wants to buy the same number, it doesn't create much of a ripple—in fact, oftentimes it is hardly noticed at all.

But there are some stocks which are closely held and for which, therefore, the market is very thin. That is true especially of stocks on some of the smaller exchanges. Even the dropping of a few hundred shares of these stocks on the market will "bear" that market tremendously and if anyone tries to buy a couple of hundred shares it will jump rapidly.

The oil industry's several tank car markets have been somewhat of that character. The dropping of 10, 20, or 30 tank cars of gasoline and only one or two cars of most other products, have found so few people in the market that the price would suffer. There would be no real justification for a lower price. The drop would come about because there weren't enough buyers in the market to absorb that amount of material.

If a notice of four or five days had been given that on a certain date these cars were going to be offered on the market, then there would have been buyers in the market in all probability in suffcient number to take up at once all that was offered at a reasonable price.

That is the theory on which the oil industry should support all of its tank car markets on all of its products. Every refiner and a large number of jobbers ought to be in every market for a car or two every day. The jobber is just as much interested in avoiding wide fluctuations in the tank car market as is the refiner. The jobber needs the advice of many other jobbers through their purchases, as to what the market ought to be, just as much as the refiner needs not only the advice of his brother refiners, but of the jobbers.

If 200 say, of the 300 odd refiners in the country, each were selling several cars at least of their important products every day on the tank car market, and if, say, 500 to 1000 of the 5000 to 6000 jobbers were in the market each day buying something, the tank car markets would be in a much healthier shape than they are now, and furthermore, the oil industry would understand more the factors and the fundamentals of those markets.

Hearst Spreading Poison

THE Hearst newspaper organization has, as we reported several weeks ago, started a vigorous attack upon the oil industry. That attack is down to the usual low standards of the Hearst organization, which pays little attention to truth, or fair play when a target has been picked out. Just what Hearst is after, is hard to say. At all events, he is seeking to get the oil industry in wrong with the public and to put over some form of government control.

As a part of his attack he is sending out from Washington, ostensibly as a part of his regular news service which he sells to other newspapers over the country, untruthful propaganda against the oil industry. Any newspaper receiving that propaganda from Hearst would be entitled under the rules of the newspaper business to bawl the Hearst organization out and make them stand telegraph tolls, etc. for it, but unfortunately newspaper editors don't read some of their stuff very closely, and some of that propaganda has gotten into the newspapers.

Putting propaganda into a news service is just as low-down as a pickpocket going to church to pray and to work on the pockets of those praying nearby.

This last piece of propaganda makes it appear that

NOW THAT LINDBERGH HAS PAVED THE WAY

the oil industry is coming to Washington to beg for higher prices. It also attacks President Coolidge and tries to make out that while he has never done anything for the cotton industry, the farmers and a lot of other people, he is now about to do much for the oil industry.

Here is a sample of that propaganda story:

"The average man will see something humorous in the spectacle of the oil barons crying on President Coolidge's shoulder, asking to have their profits restored. The farm and city joy-rider on 18-cent gasoline (including state tax) looks on this a heaven-sent dispensation, distributing to the consumer some of the plunder extracted from him by the oil companies in the past.

"The oil industry leaders will get somewhere if they come down here as patriotic Americans, if they frankly admit that they are ignorantly squandering our greatest resource, and if they accept unit operation as the way to cure the evil".

A. L. Johnson, veteran oil producer of Prairie Depot, O., sends this clipping in with the following comment:

"This sounds like the wailing of a diseased mind; at least, one that is misinformed. Whoever heard of an oil man begging for mercy or asking the government to aid them to advance prices. The oil industry has never asked for special legislation in its behalf, as have the 25,000,000 farmers mentioned in this article.

"Do you think such articles written for the purpose of molding public opinion should go unnoticed? I think they should be nailed to the cross, and the truth of the whole matter made plain to the public.

"If the 'Jasper' who wrote the article referred to, was compelled to produce Lima crude at $1.71 to keep his old buzz car running, he would soon find out what great profits there are in the oil producing business."

We have long said that all liars about the oil business should be nailed to the fence, even though it takes time and money to do it.—W. C. P.

Letters to the Editor

DR. W. A. GRUSE, fellow of the Mellon Institute of Industrial Research, Pittsburgh, has sent us an open letter addressed by himself, C. J. Livingstone and Samuel P. Marley, to R. B. White whose article on problems of motor car lubrication was published on page 83 of the April 27 issue of NATIONAL PETROLEUM NEWS. The letter follows.

"We have read with considerable interest your paper on 'Problems of Motor Car Lubrication' appearing in NATIONAL PETROLEUM NEWS for April 27. We feel that you have done considerable service both to the automotive people and to the producers of lubricating oils by your very full discussion of what goes on in automobile lubrication.

"Probably the most valuable result of such a paper will be the better understanding which the reader must have of the sources of unavoidable deterioration to which automobile oils are exposed. In other words, your discussion should serve to make the user of motor oil a little less unreasonable in his expectations.

"There is, however, one part of your paper with which we can not fully agree. That is the section on carbon deposits. It is possible that you are not familiar with the work which we have carried on in this laboratory on the subject, described in publications in the Journal of the Society of Automotive Engineers, the Journal of Industrial & Engineering Chemistry, and NATIONAL PETROLEUM NEWS. We are enclosing reprints of the papers available. There is another article forthcoming in June, which I shall be pleased to have you read on its appearance.

"The part of our work which bears on your discussion is that referring to the correlation which we have found

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to exist between the Conradson carbon value of an oil and its carbon depositing tendency in an engine. This is brought out in our first S.A.E. paper and is discussed again in the forthcoming article just mentioned.

"The general result seems to be that the relation between the carbon depositing tendency of an oil and its Conradson residue value is a linear one. The slope of the line changes with the temperature of engine operation. We believe that at some high temperature all oils, no matter what their Conradson value, would leave the same amount of carbon, but such a temperature is far beyond the limits of engine operation.

"In specific cases we have found that a medium grade of Conradson value, about 0.5, left twice as much carbon in the engine as an oil of Conradson value 0.1. Similarly in the class of heavy special oils, and at a higher temperature, an oil of Conradson 1.5 left about twice as much carbon as an oil of Conradson 0.22.

"The connection between this and your own discussion is that in general the western oils, as you call them, particularly those of California and Gulf coastal origin, are of low Conradson value for a given viscosity, while the eastern oils, Pennsylvania and Mid-Continent, are of high Conradson value for the same viscosity.

"We undertook our study without knowing of the claims which you say the western refiners make for their product. Our work supports these claims and also supports the statement made that carbon deposited from these oils of low Conradson value was soft, fluffy and easy to remove, while that from oils of high Conradson value was hard and adherent.

"We had a case not so long ago where we made engine tests on an oil without knowing its origin. The carbon was very definitely of coastal nature and on determining the physical properties of the oil we found that it really was a coastal product. The theory which we have set up to explain the relation between carbon deposit and Conradson tests is based on the idea that the volatility of the oil at the temperature of the oil coating in the combustion chamber is the determining factor in the results as to carbon deposit.

"In your paper you cite statements by the Bureau of Standards as given in their Circular No. 99 (incidentally your paper says Bulletin No. 99, but Bulletin No. 99 is something quite different). Circular No. 99, which was published seven years ago, is given over largely to a description of the relative merits of the oxidation test and the Conradson test for determining the virtues of motor oils.

"The author of the circular remarks that the next step is the correlation of these laboratory tests with actual engine tests. This is another way of confessing that he has not done so. *The words which you quote* 'The amount of carbon averages—about the same for Texas as Pennsylvania oils, and the consistency of the samples is the same,' as being the opinion of the Bureau of Standards, is *really only a quotation* in Circular No. 99, *from a trade paper published by a private company.*

"The author's only mention of his own engine experiments is exceedingly vague and is limited to a statement that deposits from different oils in an airplane engine looked alike to him. In the absence of definite data and of statements as to the kinds of oil used, it does not seem that the Bureau of Standards has made in this circular any statement which would refute anyone's claims as to carbon deposits.

"The meagre experimental work of others quoted by the author of Circular No. 99 consists of unsupported statements from the trade publications of private companies, except the work of Parish quoted from the Journal of the Society of Naval Engineers. This author states that oils of high Conradson test gave the most carbon and those of low Conradson test gave the least carbon. This is quite contrary to the conclusion you have from Circular No. 99. It would seem that you should have quoted this one of Circular No. 99's authorities as well as the other. In general it seems that Circular No. 99 really cites no definite data and settles nothing. I doubt whether it can safely be used to prove anything.

"So far as I know our own work is the first on carbon deposit which has met the test of being duplicatable. That is, we are the first who were able to get the same results twice with the same material.

"I think this makes our work trustworthy to an extent which cannot be allowed to any previous published experiments. The conclusions on carbon deposit in your address seem to have been formed in the absence of any experimental data. I believe that you will wish to modify these conclusions in the light of our published results."

THE following letter has been received from F. B. Vanderhoef, sales manager of the Tide Water Oil Co.:

"I was very much interested in reading the excellent articles entitled 'Fool Oil Specifications Pest to Refiner and do not Protect Buyer,' by Dr. M. R. Schmidt, on pages 69, 70, 73 and 74 of the June 1 issue.

"The article certainly hits the nail on the head and points out the difficulties confronting refiners by virtue of stringent specifications adopted by users without regard to the lubricating qualities of oils."

"I should like to secure your permission to have this article reprinted for distribution and would request you to advise me whether this would meet with your approval."

Fall in April Production Is Surprise; Drafts on Gasoline Stocks Begin

By Roger B. Stafford
N. P. N. STAFF WRITER

CLEVELAND, June 10.

PRODUCTION of crude oil averaged 23,500 barrels less a day in April than in March, according to statistics of the Bureau of Mines. The decline is against all expectations in the oil industry during April. The decline in average daily production to 2,405,700 barrels net was accomplished through shutdowns in older Oklahoma fields while Seminole production continued to rise. Stocks of crude oil April 30 were 415,524,000 barrels net, a gain of 7,960,000 barrels in April. Stocks of crude increased 7,571,000 barrels east of California and 389,000 barrels in California.

April was the sixth consecutive month in which stocks of crude oil east of California increased. It was the second consecutive month in which crude stocks in California rose. Other prominent points in the bureau's April report are:

1. Increase of 7,838,000 barrels in above ground stocks of both crude and refined oils.

2. Decrease of 122,000 barrels in stocks of refined oils.

3. Decrease of 31,000 barrels in stocks of gasoline.

4. Gasoline output approximately 14,000 barrels daily average less than March average output. Imports were 3,000 barrels daily average less. Exports were 16,000 barrels daily average more. Domestic shipments were 54,000 barrels daily average more.

5. Domestic gasoline shipments and exports were only about 500 barrels daily average more than domestic output and imports.

6. Domestic gasoline demand in the first four months of 1927 was 11.4 per cent more than in the same months of 1926. Domestic demand in April, 1927, was 12.1 per cent more than in April, 1926.

7. Curtailment of cracking operations; 29 per cent of all gasoline produced at refineries was cracked in April, compared with 31 per cent in March and 32 per cent in February. Percentage of natural gasoline used at refineries was constant at 10 in all three months.

8. Increase of 43.9 per cent in movement of California gasoline to eastern ports of United States in April over March.

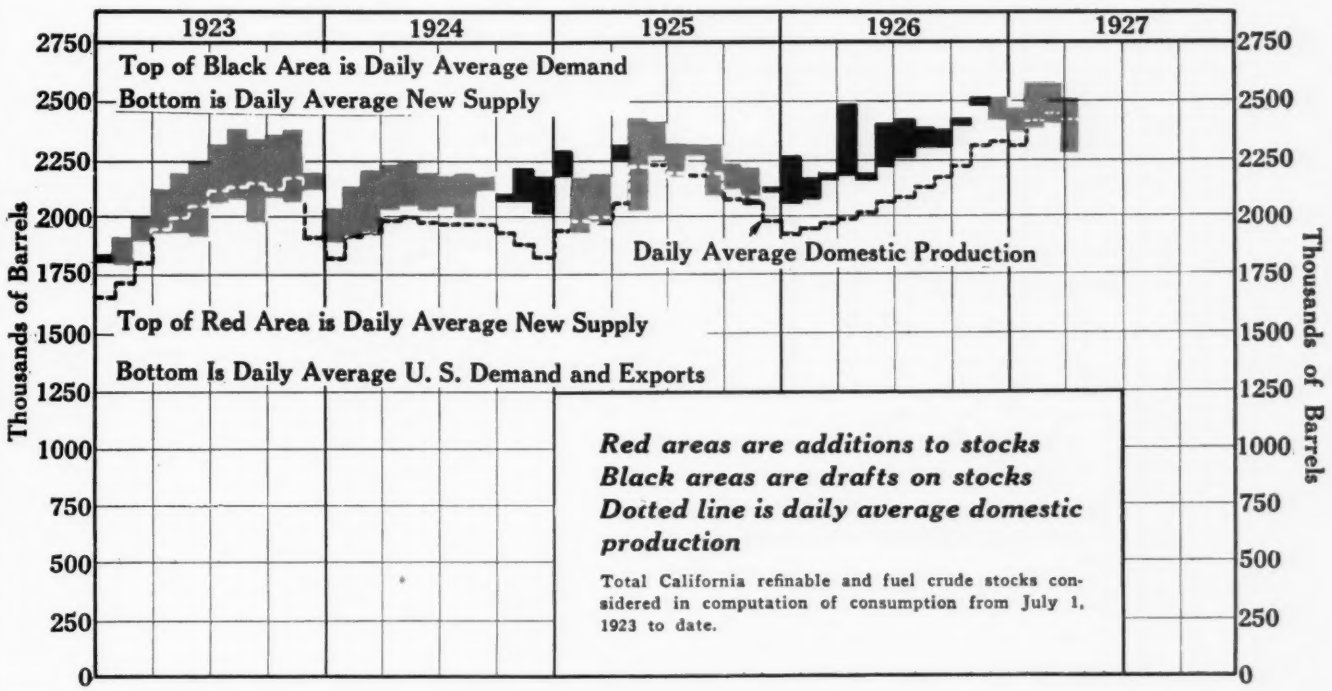
9. Increased exports caused withdrawal of 28,000 barrels from kerosene stocks. Domestic output was almost at the March level and domestic demand fell 15,000 barrels daily average to 93,000 barrels daily. Output averaged 154,000 barrels daily. Exports averaged 62,000 barrels daily.

10. Both domestic and foreign demand for lubricants was less in April than in March and stocks rose 141,000 barrels. Production was slightly less than in March.

11. Paraffin wax stocks rose 9,670,000 pounds when domestic and foreign demand fell and imports rose. Domestic output, however, was 100,000 pounds daily average less in March than in April.

12. Gas and fuel oil stocks east of California increased more than 1,-

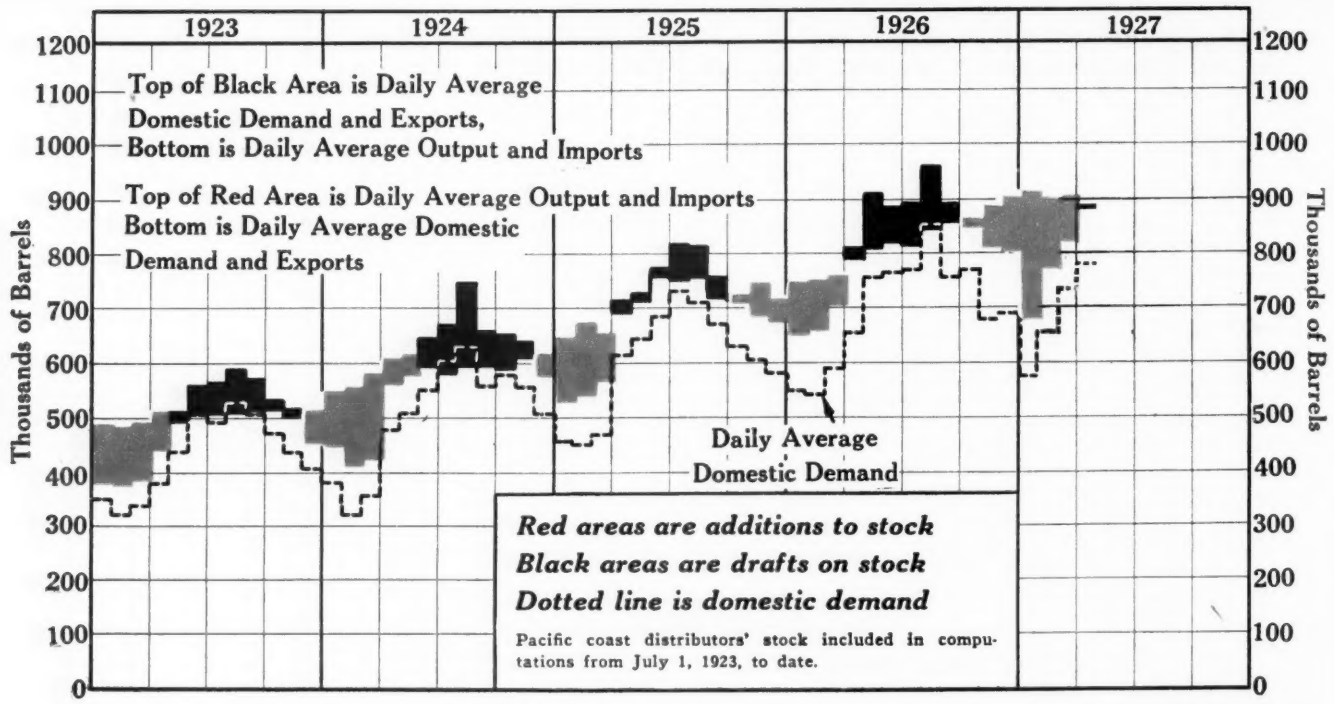
Crude Oil Production and Demand



April domestic production	2,406,000 *Bbls. daily av.*
April imports	135,000 *Bbls. daily av.*
Total new supply	2,541,000 *Bbls. daily av.*
April indicated demand east of California	1,610,900 *Bbls. daily av.*
April California deliveries	635,900 *Bbls. daily av.*
April exports	39,000 *Bbls. daily av.*
Total indicated demand	2,275,800 *Bbls. daily av.*

Stocks in pipe lines and at tank farm east of California, April 30, 1927	259,748,000 *Bbls.*
Stocks at refineries east of California	37,485 *Bbls.*
Stocks of foreign crude not at refineries	448,000 *Bbls.*
California stocks 20° and lighter	29,460,000 *Bbls.*
California stocks heavier than 20°	88,383,000 *Bbls.*
Total stocks April 30, 1927	415,524,000 *Bbls.*
Total stocks April 30, 1926	410,719,000 *Bbls.*

Gasoline Production and Consumption



April domestic output	885,900 *Bbls. daily av.*	*April exports*	120,000 *Bbls. daily av.*
April imports	12,600 *Bbls. daily av.*	*Total indicated demand*	899,000 *Bbls. daily av.*
Total new supply	898,500 *Bbls. daily av.*	*Stocks April 30, 1927*	52,379,000 *Bbls.*
April domestic shipments	779,000 *Bbls. daily av.*	*Decrease in stocks in April*	31,000 *Bbls.*
		Stocks April 30, 1926	45,767,000 *Bbls.*

000,000 barrels. Output was slightly more than in March.

13. Charges of crude to stills averaged 2,232,200 barrels in April compared with 2,228,400 barrels in March. Charges of all oils including natural gasoline averaged 2,417,700 barrels in April and 2,421,000 barrels in March.

14. Production of natural gasoline was slightly more in April than in March. Stocks of natural gasoline were 58,800 barrels larger April 30 than March 31.

The 551,624,000 barrels of crude and refined oils April 30 represented 237.7 days' supply at the April rate of demand. The 534,062,000 barrels of stock April 30, 1926 represented 205.1 days' supply.

DEMAND seems to have been abnormally low in April, 1927. Export and domestic demand for both crude and refined oils was less than in April, 1926, and average demand was less than in either March or February this year. Because of that fact, it is doubtful that the days' supply figure is indicative of conditions that have existed since the end of April. Even in March the total stocks represented only 231.3 days' supply and from the end of March to the end of August or September the days' supply index should gradually recede.

The low demand in April may be offset by higher demand in May, statistics for which will not be available for several weeks. The rise in price of gasoline at Mid-Continent refineries in May indicates that demand in May may have made up for the April slump.

Daily average production in Oklahoma fell 29,400 barrels although average production in the Seminole rose 25,000 barrels. This means that average production in the older fields fell 54,400 barrels in April. This decline proves a drastic shutdown in the state outside of the four flush pools of Seminole.

Texas production rose 12,200 barrels daily average although the Panhandle district's average recovery was 3,000 barrels less in April than in March. A gain of 11,000 barrels in daily average production in the Seal Beach field brought California's production up 9,000 barrels daily average over the March average to 648,900 barrels daily.

Louisiana's production fell 4,100 barrels and Illinois' 4,600 barrels daily average. In other states fluctuations were small.

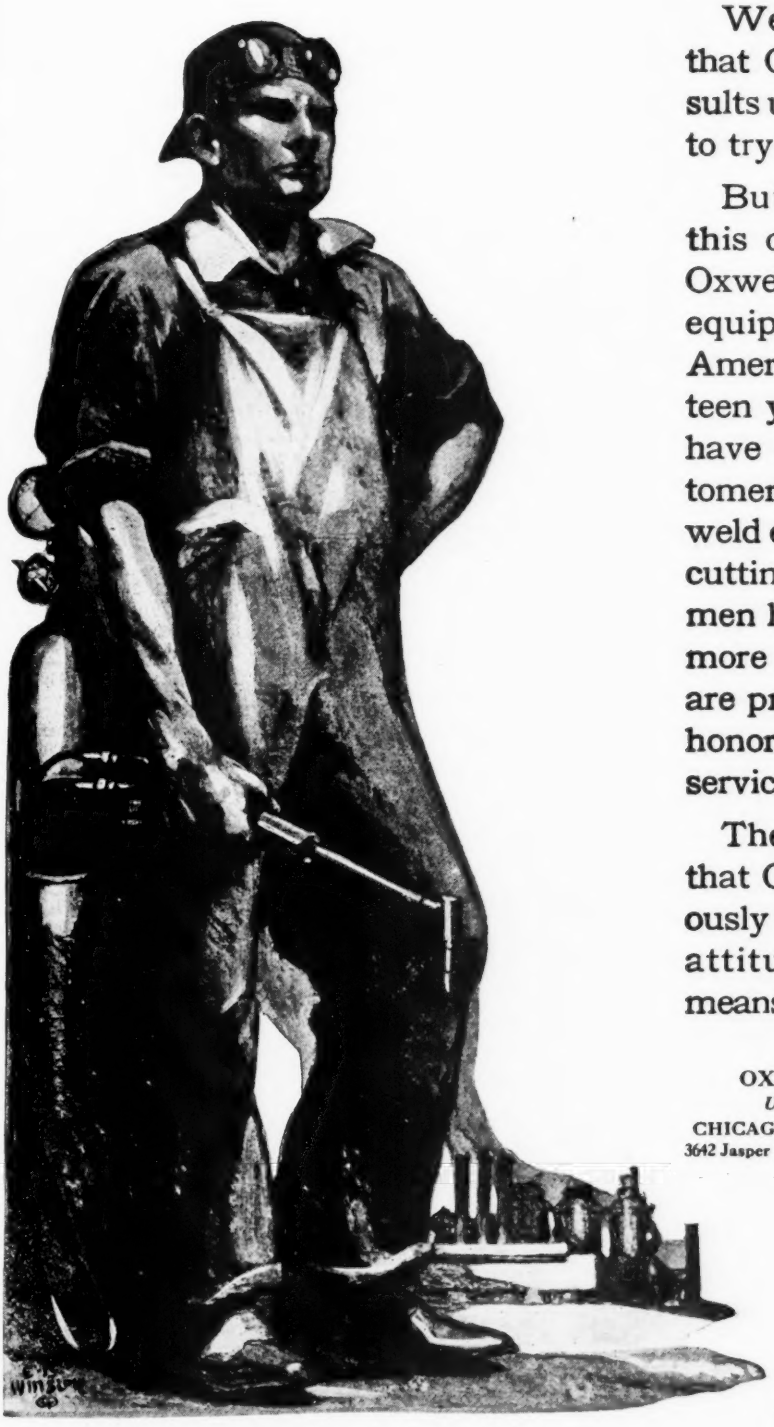
OF THE daily average production in April 2,093,600 barrels was crude 24° A.P.I. gravity and lighter, and 312,100 barrels was heavier than 24°. Of the 1,999,600 barrels average production in April, 1926, 1,637,200 barrels was light and 362,400 heavy. The average gravity of the Seminole crude

Petroleum Supply and Demand—Barrels

	April 1927	March 1927	February 1927	April 1926
Dom estic crude production: Light	62,809,000	65,435,000	58,850,000	49,120 000
Heavy	9,869,000	9,869,000	9,024,000	10,872 000
Imports of crude oil	4,063,000	4,434,000	4,181,000	5,906 000
Imports of refined oil	1,201,000	1,175,000	1,508,000	1,617 000
Total new supply of all oils	77,436,000	80,913,000	73,563,000	67,515 000
Total stocks end of preceding month	543,786,000	535,499,000	527,144,000	544,643 000
Total supply of all oils	621,222,000	616,412,000	600,707,000	612,158 000
Exports of crude oil	1,171,000	1,199,000	1,165,000	1,308 000
Exports of refined oil	9,917,000	9,450,000	9,686,000	10,688 000
Domestic demand, crude and refined	58,510,000	61,977,000	54,357,000	66,100 000
Total demand	69,598,000	72,626,000	65,208,000	78,096,000
Total stocks end of month	551,624,000	543,786,000	535,499,000	534,062,000
Increase in stocks	7,838,000	8,287,000	8,355,000	*8,512,000
Daily average new supply	2,581,000	2,610,000	2,627,000	2,251,000
Daily average demand	2,320,000	2,343,000	2,329,000	2,603,000
Daily average excess of supply	261,000	267,000	298,000	†352,000
Crude stocks:				
East of California: Light	251,459,000	244,785,000	237,968,000	226,799,000
Heavy	46,222,000	45,325,000	47,490,000	59,630,000
In California: Light	29,460,000	29,568,000	29,770,000	38,634,000
Heavy	88,383,000	87,886,000	87,640,000	85,656,000
Total stocks of crude	415,524,000	407,564,000	402,868,000	410,719,000
Total stocks of refined	136,100,000	136,222,000	132,631,000	123,343,000

*Decrease. †Daily average deficiency.

There are two kinds of "service"



ONE KIND of "service" means only promises and the other kind produces results.

We do not ask you to believe that Oxweld service means results until you have had occasion to try it.

But we do ask you to think this over! For fourteen years Oxweld injector blowpipes and equipment have been sold to American industries. For fourteen years Oxweld service men have aided and instructed customers in the efficient use of Oxweld equipment for welding and cutting. Some of these service men have been with Oxweld for more than ten years. And they are proud of the job, for it is an honor to be selected for Oxweld service work.

These are facts. They indicate that Oxweld takes service seriously and believes in it. It is an attitude toward service that means—results.

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STOCKS IN 39 CITIES

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is 41°, Panhandle 36° and Seal Beach 24°.

Less California crude is being moved to Atlantic and Gulf coast refineries this year than last year. In the first four months this year the total coastwise movement of California crude was 2,254,000 barrels, compared with 5,004,000 barrels in the first four months of 1926. In April, 1927, the movement totaled 462,000 barrels, compared with 572,000 barrels in March.

UNTIL the end of April the Mid-Continent field had produced 168,547,000 barrels of crude this year. In the corresponding time last year the recovery amounted to only 126,093,000 barrels. Only the Rocky Mountain, Lima-Indiana, and Southwestern Indiana-Illinois fields have produced less oil this year than last. California's four-month total of 77,470,000 barrels is a gain of 4,318,000 barrels. The Gulf Coast's total of 17,408,000 barrels is a gain of 6,754,000 barrels. Imports of foreign crude which have totaled 17,192,000 barrels this year, is a decline of 4,361,000 barrels from last year's four-month total. New supply in the United States in four months this year totaled 304,017,000 barrels, a gain of 47,563,000 barrels or 18.5 per cent over the first four months of 1926.

Refiners in April added only 53,000 barrels of crude to their stocks. Pipe line and tank farm stocks east of California were increased 7,571,000 barrels, including a small volume of imported crude.

Imports in March and April compare as follows, amounts are daily averages:

Origin	April	March
Mexico	64,900	53,300
Venezuela	35,100	47,600
Colombia	19,700	27,600
Other countries	15,700	14,500
Total	135,400	143,000

Average runs of all oils to stills were reduced in only four of the eight districts into which the Bureau of Mines groups refineries. These were the East Coast, Indiana-Illinois, Louisiana-Arkansas and Rocky Mountain. It was only in California that much of an increase was made, the California average charges rising to 615,330 barrels daily from 597,839 barrels.

Gasoline production was increased considerably in California and to less degree in the Appalachian, Texas, and

Crude Production - - - Barrels

(Daily Averages)

States	April 1927	March 1927	April 1926
Arkansas	110,000	123,700	180,167
California	648,900	639,900	603,059
Colorado	10,000	7,800	6,167
Illinois	17,800	22,400	19,300
Indiana	2,200	2,200	2,133
Kansas	115,900	115,800	112,533
Kentucky	18,000	17,700	17,217
Louisiana	56,300	60,400	63,300
Michigan	1,300	1,200	.....
Montana	13,700	14,400	24,033
New Mexico	4,900	4,600	3,833
New York	6,100	6,300	5,500
Ohio	21,400	22,100	20,333
Oklahoma	698,300	727,700	483,075
Pennsylvania	26,800	27,200	24,933
Tennessee	100	100	150
Texas	578,600	560,400	345,566
West Virginia	16,700	17,500	16,534
Wyoming	58,700	57,800	71,767
Total U. S.	2,405,700	2,429,200	1,999,600
CLASSIFICATION BY GRAVITY			
24° A. P. I. and lighter	2,093,600	2,110,800	1,637,200
Heavier than 24°	312,100	318,400	362,400

Stocks of Crude Oil

(Domestic unless otherwise specified. Amounts in Thousands of Barrels)

Districts	April 1927	March 1927	April 1926
AT REFINERIES			
East Coast:			
Domestic	7,464	7,230	6,456
Foreign	2,782	2,206	3,229
Appalachian	1,648	1,627	1,624
Indiana, Illinois, etc.	2,545	2,561	1,727
Oklahoma, Kansas, etc.	3,922	3,841	4,072
Texas Inland	1,173	1,197	1,025
Texas Gulf Coast:			
Domestic	8,220	8,481	6,642
Foreign	323	257	369
Arkansas, Inland Louisiana	408	441	631
Louisiana Gulf Coast:			
Domestic	6,788	7,317	5,102
Foreign	832	889	1,732
Rocky Mountain	1,380	1,385	1,571
U. S. East of Calif.	37,485	37,432	34,180
AT TANK FARMS, IN PIPE LINES AND ELSEWHERE THAN REFINERIES			
Appalachian	6,597	6,424	6,893
Kentucky	1,212	1,151	1,778
Lima-Indiana	731	695	889
Ill.-S. W. Indiana	11,762	11,810	11,771
Okla.-Kans., Texas except Coastal	167,051	159,050	141,401
N. La.-Ark.	27,558	28,405	42,540
Gulf Coast	17,955	17,896	16,266
Rocky Mountain	26,882	26,835	30,122
Foreign crude:			
Atlantic ports	109	71	56
Gulf ports	339	341	312
East of Calif.	297,681	290,110	286,208
California:			
20° and lighter	29,460	29,568	38,634
Heavier than 20°	88,383	87,886	85,656
Grand Total	415,524	407,564	410,498
CLASSIFICATION BY GRAVITY (Elsewhere than refineries east of California)			
24° and lighter	251,459	244,785	229,148
Heavier than 24°	46,222	45,325	57,060

Crude Oil Production by Fields—Barrels

Fields	April Daily Average 1927	Mar. Daily Average 1927	Apr. Daily Average 1926	Total Jan.-Apr. 1927	Total Jan.-Apr. 1926
Applachian	84,300	85,800	79,300	9,837,000	9,056,000
Lima-Indiana	5,200	5,500	5,700	622,000	665,000
Michigan	1,300	1,200	.....	136,000	10,000
Ill.-S. W. Indiana	19,600	24,200	21,100	2,596,000	2,756,000
Mid-Continent	1,421,900	1,446,900	1,095,808	168,547,000	126,093,000
Gulf Coast	137,200	141,100	88,833	17,408,000	10,654,000
Rocky Mountain	87,300	84,600	105,800	10,209,000	12,515,000
California	648,900	639,900	603,059	77,470,000	73,152,000
Total U. S.	2,405,700	2,429,200	1,999,600	286,825,000	234,901,000
Imports	149,300	143,000	196,867	17,192,000	21,553,000
Total New Supply Crude	2,555,000	2,572,200	2,196,467	304,017,000	256,454,000

Gasoline Situation by Districts—Barrels

Districts	April Daily Avg. Output	March Daily Avg. Output	April Chge. %	April Daily Avg. Shipments	March Daily Avg. Shipments	April Chge. %	Stocks Apr. 30 1927	Stocks Mar. 31 1927	Stocks Apr. 30 1926
East Coast	132,033	146,323	— 9.77	116,867	106,258	+ 9.98	11,166,000	10,711,000	9,560,522
Appalachian	34,200	34,000	+ 0.59	38,600	31,194	+23.74	1,246,000	1,378,000	1,057,405
Indiana-Illinois	106,433	112,581	— 5.46	115,733	103,323	+12.01	5,690,000	5,969,000	6,466,666
Oklahoma-Kansas	140,700	144,194	— 2.42	138,833	137,710	+ 0.82	4,595,000	4,539,000	3,933,142
Texas	196,033	193,516	+ 1.30	188,567	197,000	— 4.28	7,331,000	7,107,000	5,434,261
Louisiana-Arkansas	62,100	65,774	— 5.59	78,500	56,354	+39.30	3,649,000	4,141,000	4,022,571
Rocky Mountain	46,733	46,226	+ 1.10	40,967	37,710	+ 8.64	5,204,000	5,031,000	4,834,833
California	167,668	156,935	+ 6.84	168,867	143,032	+18.06	13,498,000	13,534,000	10,564,998
Total U. S.	885,900	899,549	— 1.52	886,934	812,581	+ 9.15	52,379,000	52,410,000	45,874,398
Texas Gulf Coast	156,667	153,645	+ 1.97	149,200	160,000	— 6.75	6,473,000	6,249,000	4,834,880
Louisiana Gulf Coast	49,467	53,000	— 6.67	66,233	43,613	+51.87	3,507,000	4,010,000	3,898,166

Natural Gasoline and Motor Blends—Barrels

Districts	Daily Avg. Production April (Net)	Daily Avg. Production Mar. (Net)	Stocks End of April	Stocks End of March	Motor Fuel Blends Made In April	Motor Fuel Blends Made In March	Stocks of Blends End of April	Stocks of Blends End of March
Appalachian	6,587	7,373	105,714	81,786	12,476	15,667	7,024	7,238
Indiana-Illinois, etc.	1,111	1,152	13,214	8,571	2,048	2,762	381	381
Oklahoma-Kansas	35,952	*35,023	337,738	332,619	133,857	113,857	27,024	20,476
Texas	20,952	21,813	212,167	189,857	22,024	17,976	8,405	2,310
Louisiana-Arkansas	5,555	5,376	45,905	41,429	12,452	11,952	833	1,595
Rocky Mountain	3,175	3,073	10,571	11,833	5,762	5,476	2,119	2,429
Total east of California	73,332	*73,810	725,309	666,095	188,619	167,690	45,786	34,429
California	32,381	31,720	31,214	30,619	.....	.....	24	48
Total United States	105,713	*105,530	756,523	696,714	.....	.....	45,810	34,477

*Revised.

TRANSMIGRATION OF TRANSPORTATION

Modern transportation is measured in miles per hour instead of miles per day.
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The highest type motor fuel calls for a proper percentage of NATURAL GASOLINE to meet the requirements of modern motors.
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CHESTNUT & SMITH CORPORATION

Tulsa, Oklahoma

Rocky Mountain districts. Shipments were larger than in March from all districts except Gulf Coastal, Texas and north Louisiana-Arkansas.

Largest reduction in stocks was in the Louisiana Gulf Coast region. There were small reductions in California and Appalachian districts.

Movement of California gasoline to eastern ports of the United States was larger than in March, totaling 872,000 barrels, compared with 606,-

Kerosene Situation by Districts—Barrels

Districts	April Daily Avg. Output	March Daily Avg. Output	April Chge. %	April Daily Avg. Shipments	March Daily Avg. Shipments	April Chge. %	Stocks Apr. 30 1927	Stocks Mar. 31 1927	Stocks Apr. 30 1926
East Coast	29,000	29,226	— 0.77	31,800	20,839	+52.60	1,621,000	1,705,000	1,371,285
Appalachian	11,400	10,968	+ 3.94	11,333	10,065	+12.60	294,000	292,000	175,429
Indiana-Illinois	12,900	12,968	— 0.52	15,867	15,452	+ 2.69	774,000	863,000	618,190
Oklahoma-Kansas	24,867	24,097	+ 3.20	24,267	26,548	— 8.59	603,000	585,000	281,762
Texas	31,200	38,548	—19.06	32,267	39,355	—18.01	1,773,000	1,805,000	1,404,928
Louisiana-Arkansas	19,233	17,323	+11.03	14,167	15,387	— 7.93	1,396,000	1,244,000	1,038,833
Rocky Mountain	6,967	4,355	+59.98	5,633	5,516	+ 2.12	446,000	406,000	262,929
California	18,033	17,419	+ 3.53	19,200	18,581	+ 3.33	1,818,000	1,853,000	1,860,999
Total U. S.	153,600	154,904	— 0.84	154,534	151,742	+ 1.84	8,725,000	8,753,000	7,014,355
Texas Gulf Coast	25,267	31,710	—20.32	27,133	32,000	—15.21	1,289,000	1,345,000	1,209,024
Louisiana Gulf Coast	17,433	15,710	+10.97	12,300	13,968	—11.94	1,352,000	1,198,000	1,027,905

Lubricants Situation by Districts—Barrels

Districts	April Daily Avg. Output	March Daily Avg. Output	April Chge. %	April Daily Avg. Shipments	March Daily Avg. Shipments	April Chge. %	Stocks Apr. 30 1927	Stocks Mar. 31 1927	Stocks Apr. 30 1926
East Coast	27,933	30,806	— 9.33	24,467	37,129	—34.10	2,821,000	2,717,000	2,476,000
Applachian	11,200	11,742	— 4.62	12,333	12,065	+ 2.22	984,000	1,018,000	867,476
Indian-Illinois	7,867	8,097	— 2.84	8,967	9,548	— 6.09	720,000	753,000	760,071
Oklahoma-Kansas	6,600	5,710	+15.59	7,367	6,000	+22.78	452,000	475,000	456,881
Texas	22,333	23,000	— 2.90	18,833	23,548	—20.02	2,026,000	1,921,000	1,658,024
Louisiana-Arkansas	2,933	1,839	+59.49	2,833	2,032	+39.42	128,000	125,000	103,976
Rocky Mountain	1,767	1,677	+ 5.37	2,133	2,484	—14.13	125,000	136,000	182,048
California	6,533	5,968	+ 9.47	5,533	6,548	—15.50	920,000	850,000	864,000
Total U. S.	87,166	88,839	— 1.88	82,466	99,355	—17.00	8,176,000	8,035,000	7,368,476
Texas Gulf Coast	21,533	22,065	— 2.41	17,633	22,742	—22.47	1,995,000	1,878,000	1,626,762
Louisiana Gulf Coast	2,900	1,839	+57.69	2,800	2,032	+37.80	128,000	125,000	103,881

Gas and Fuel Oil—Situation by Districts—Barrels

Districts	April Daily Avg. Output	March Daily Avg. Output	April Chge. %	April Daily Avg. Shipments	March Daily Avg. Shipments	April Chge. %	Stocks Apr. 30 1927	Stocks Mar. 31 1927	Stocks Apr. 30 1926
East Coast	171,733	190,226	— 9.72	150,533	186,032	—19.08	6,587,000	5,951,000	4,596,928
Appalachian	19,033	17,839	+ 6.69	17,767	17,935	— 0.94	835,000	797,000	492,548
Indiana-Illinois	55,100	54,742	+ 0.65	51,800	56,226	— 7.87	961,000	862,000	851,643
Oklahoma-Kansas	90,000	82,161	+ 9.54	88,200	74,032	+19.14	4,473,000	4,419,000	3,229,119
Texas	200,933	188,806	+ 6.42	186,467	186,968	— 0.27	7,870,000	7,436,000	6,684,689
Louisiana-Arkansas	103,333	99,877	+ 3.67	103,300	90,871	+13.68	2,508,000	2,507,000	2,573,452
Rocky Mountain	19,867	20,161	— 1.46	22,900	26,645	—14.06	498,000	589,000	1,344,976
California	401,867	390,806	+ 2.83	.....	.....	.....	.....	.....	.....
Total U. S.	1,061,866	1,044,418	+ 1.67	*1,022,833	*1,029,516	— 0.65	*23,732,000	*22,561,000	*19,773,355
Texas Gulf Coast	155,100	145,032	+ 6.94	142,033	142,323	— 0.20	6,658,000	6,266,000	5,769,428
Louisiana Gulf Coast	62,767	60,548	+ 3.66	62,433	52,613	+18.66	1,915,000	1,905,000	1,863,357

*East of California.

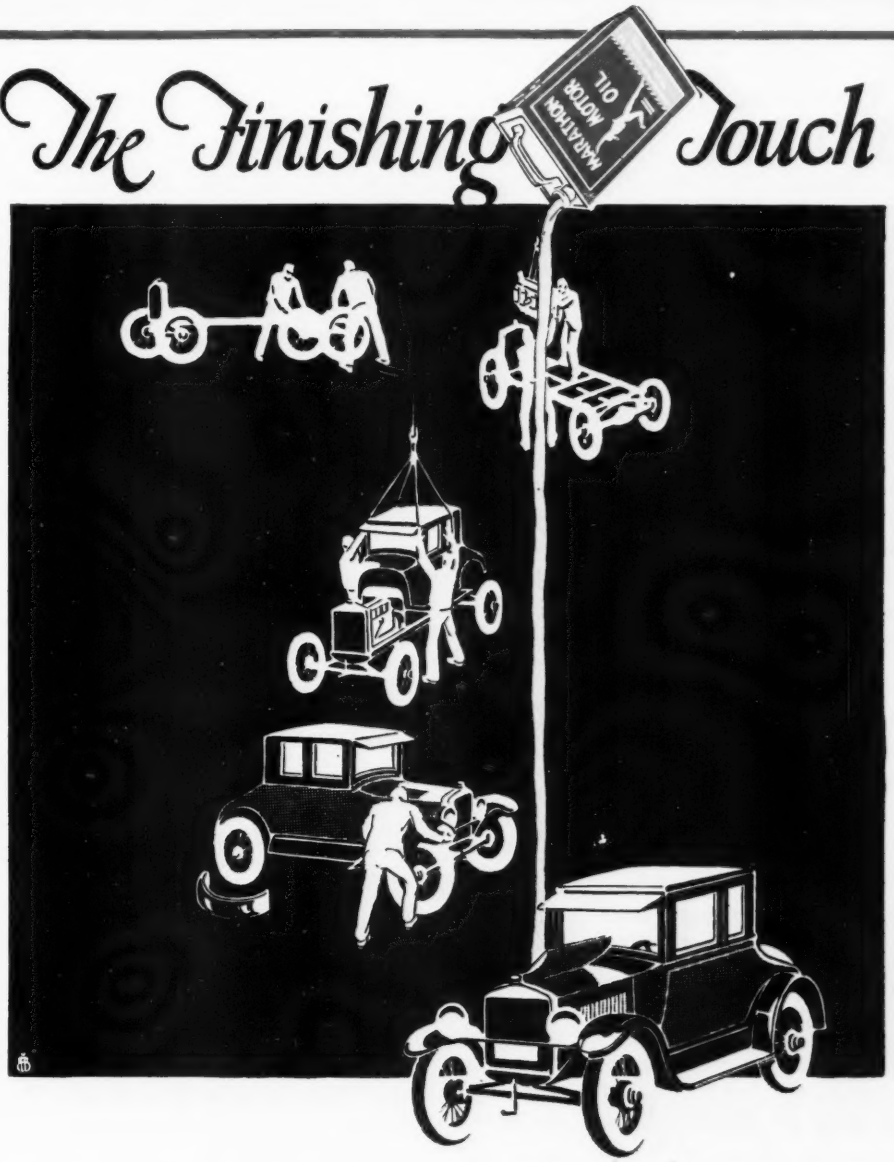
Coke, Asphalt, Miscellaneous Products

	Coke Output (Tons)	Coke Stocks (Tons)	Asphalt Output (Tons)	Asphalt Stocks (Tons)	Miscel. Products Output (Bbls.)	Miscel. Products Stocks (Bbls.)	Unfin. Oil Output (Bbls.)	Unfin. Oil Stocks (Bbls.)	Losses (Bbls.)
January 1926	73,701	230,566	162,383	174 564	491,652	1,063,619	2,097,000	37,880,000	1,995,000
February	64,105	210,247	152,468	182,063	481,428	1,073,238	2,340,500	28,808,000	1,767,000
March	80,689	219,820	210,596	195,052	597,810	1,217,119	2,195,928	39,098,000	2,059,000
April	76,031	216,163	198,598	239,953	572,381	1,138,095	2,481,952	38,785,000	1,982,000
May	79,982	234,025	248,390	229,819	779,310	1,210,428	2,756,024	38,681,000	2,270,000
June	81,326	246,707	300,970	200 881	784,476	1,010,381	2,767,000	40,081,000	2,308,000
July	83,358	260,727	281,196	184 853	800,310	897,452	2,927,214	38,527,000	2,419,000
August	89,100	277,668	305,944	200 175	733,000	858,000	2,848,000	39,822,000	2,605,000
September	95,111	287,546	308,572	188,512	749,000	835,000	2,721,000	39,500,000	2,492,000
October	87,946	287,354	323,348	187,845	738,000	863,000	2,790,000	40,006,000	2,437,000
November	91,459	285,905	215,973	166,788	661,000	1,030,000	2,455,000	38,770,000	2,267,000
December	92,500	290,582	213,697	193,331	644,000	1,100,000	2,399,000	38,829,000	2,288,000
1926, Total	995,308	.....	2,922,788	.....	8,030,000	.....	31,240,000	.....	26,928,000
January 1927	92,914	287,394	191,180	215,337	511,000	1,189,000	2,473,000	*39,287,000	2,367,000
February	88,102	294,682	172,685	234,450	546,000	1,282,000	2,729,000	38,986,000	2,091,000
March	98,163	325,521	222,309	235,251	525,000	1,356,000	2,412,000	39,392.000	2,369,000
April	88,404	318,529	273,767	219,502	561,000	1,410,000	1,978,000	38,095,000	2,237,000

Daily Average Runs to Stills—All Oils—Barrels

	East Coast	Appala.	Ind.-Ill.	Okla.-Kans.	Texas	La.-Ark.	Rocky Mt.	Calif.	Total U. S.
January 1926	334,742	73,516	185,709	261,903	426,129	196,484	87,548	558,097	2,120,900
February	360,036	78,428	192,964	256,857	434,674	200,357	96,250	549,821	2,169,400
March	369,032	74,677	187,419	250,742	422,774	203,839	98,355	563,228	2,176,500
April	365,400	77,133	203.033	266,000	451,667	205,867	98,733	557,900	2,225,200
May	373,516	81,677	211,065	293,903	431,451	199,161	101,322	588,613	2,280,700
June	382,800	85,433	211,467	293,267	446,867	207,433	107,033	574,033	2,308,300
July	418,742	83,097	210,193	292,645	448,516	206,839	102,355	575,193	2,337,600
August	395,935	87,613	208,677	300,484	446,484	211.129	106,903	599,645	2,356,900
September	404,600	86,667	212,300	300,167	452,900	213,000	109,333	607,867	2,386,833
October	427,935	87,645	208,710	279,645	482,935	210,612	113,323	587,645	2,398,500
November	462,200	86,567	214,600	288,800	480,466	209,033	108,566	585,633	2,436,866
December	442,968	84,838	209,355	284,516	516,354	226,903	102,613	589,322	2,456,870
January 1927	408,355	82,581	206,226	278,258	517,160	228,516	103,161	616,516	2,440,774
February	412,714	86,928	197,785	295,964	504,642	228,107	103,321	633,108	2,462,571
March	439,387	83,097	209,161	283,548	479,806	224,903	103,290	597,839	2,421,032
April	411,367	84,400	204,067	286,067	491,567	224,400	100,500	615,333	2,417,701

The Finishing Touch



MARATHON MOTOR OIL "F" FOR FORDS

MARATHON Motor Oil "F" for Fords is a special oil refined with care and science for the purpose of lending the finishing touch to the proper operation of a Ford car.

We can provide you with this special MARATHON Motor Oil "F" for Fords, guaranteed in quantities from a can to a car load.

TRANSCONTINENTAL OIL CO.

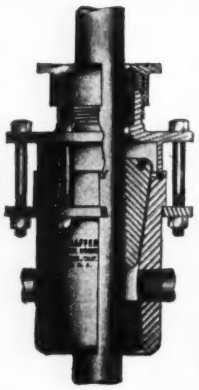
Producers, Refiners, and Marketers of Marathon Quality Products

GENERAL OFFICES *Ritz Building* TULSA, OKLA.

Sales Offices:
Alanta, Chicago, Fort Worth, Bristow, Pittsburgh, Sioux City, Little Rock

Refineries:
Boynton, Bristow, Fort Worth

Warehouses at convenient shipping points.



Shaffer Olinda Type Casing and Tubing Head

A modern improvement in casing head design and construction. Provides a method by which the casing can be supported at any time by slips, and then packed off. Casing or tubing can be quickly set at any point, and packed off afterwards. Packing can be renewed or adjusted without disturbing the pipe. No chance to "bottle neck" the casing or tubing. Takes less than 24-inches in cellar room. Write for complete description and data.

Shaffer Tool Works

Brea, California, U. S. A.

Distributed By

Robt. N. Atmore Co., Tulsa, Okla. Robt. J. Miller Co., Houston, Texas.

Sold By Leading Supply Houses.

If You Sell

TRANSMISSION AND DIFFERENTIAL STASO SERVICE

TRANSMISSION & DIFFERENTIAL

Lubricant

You can cash in on a real sales opportunity

000. In the first four months of 1927 3,328,000 barrels of California gasoline was shipped east through the Panama canal to American ports, compared with 2,432,000 barrels in the corresponding four months of 1926.

More natural gasoline blends were made in April than in March and

Gasoline Demand and Supply—Barrels

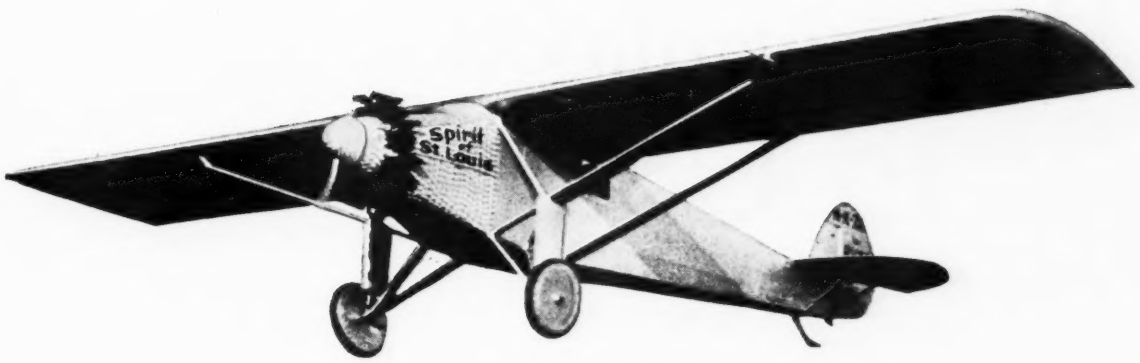
	Production	Imports	Exports	Domestic Shipments	Stocks End of Month
January, 1926*	23,208,000	384,000	3,361,000	17,582,000	41,524,000
February	21,259,000	408,000	3,245,000	15,814,000	44,132,000
March	23,868,000	517,000	3,094,000	19,302,000	46,121,000
April	24,296,000	454,000	4,256,000	20,848,000	45,767,000
May	25,271,000	621,000	4,530,000	24,213,000	42,916,000
June	24,946,000	464,000	3,744,000	23,803,000	40,779,000
July	25,504,000	460,000	3,702,000	24,752,000	38,289,000
August	25,942,000	674,000	3,572,000	26,912,000	34,421,000
September	25,360,000	258,000	3,853,000	22,929,000	33,257,000
October	26,337,000	874,000	2,783,000	23,973,000	33,712,000
November	26,245,000	486,000	3,920,000	20,618,000	35,905,000
December	27,498,000	452,000	3,413,000	21,419,000	39,023,000
*1926 Total	299,734,000	6,052,000	43,473,000	262,165,000	.....
January, 1927	27,960,000	520,000	3,557,000	17,888,000	46,058,000
February	25,024,000	416,000	3,544,000	18,240,000	49,714,000
March	27,886,000	493,000	3,219,000	22,646,000	52,410,000
April	26,577,000	377,000	3,614,000	23,371,000	52,379,000

*All 1926 figures except imports revised.

Kerosene, Lubes, Wax, Fuel and Gas Oils—by Months

KEROSENE (Bbls.)	Production	Imports	Exports	Domestic Shipments	Stocks End of Month
January, 1926	5,122,000	.....	1,871,000	3,521,000	6,851,000
February	4,746,000	1,000	1,577,000	3,166,000	6,855,000
March	5,516,000	1,000	1,876,000	3,492,000	7,004,000
April	5,037,000	1,000	1,760,000	3,268,000	7,014,000
May	5,210,000	4,000	1,623,000	3,227,000	7,378,000
June	5,009,000	3,000	1,601,000	2,908,000	7,881,000
July	4,877,000	21,000	1,612,000	2,733,000	8,434,000
August	5,162,000	20,000	2,689,000	2,731,000	8,196,000
September	5,207,000	21,000	1,843,000	3,419,000	8,162,000
October	5,126,000	3,000	1,818,000	3,235,000	8,238,000
November	5,357,000	.....	1,943,000	3,592,000	8,060,000
December	5,399,000	.....	1,847,000	3,037,000	8,575,000
1926 Total	61,768,000	75,000	22,060,000	38,329,000	.....
January, 1927	5,113,000	.....	1,616,000	3,882,000	8,190,000
February	4,453,000	1,000	1,399,000	2,590,000	8,655,000
March	4,802,000	3,000	1,351,000	3,356,000	8,753,000
April	4,608,000	1,000	1,861,000	2,776,000	8,725,000
LUBRICANTS (Bbls.)					
January, 1926	2,648,000	2,000	727,000	1,632,000	7,544,000
February	2,448,000	1,000	789,000	1,294,000	7,910,000
March	2,646,000	4,000	740,000	2,180,000	7,640,000
April	2,692,000	3,000	928,000	2,039,000	7,368,000
May	2,863,000	11,000	717,000	1,869,000	7,656,000
June	2,681,000	3,000	984,000	2,042,000	7,314,000
July	2,831,000	1,000	747,000	2,071,000	7,328,000
August	2,648,000	2,000	660,000	2,092,000	7,226,000
September	2,645,000	2,000	705,000	2,019,000	7,149,000
October	2,768,000	2,000	704,000	1,778,000	7,437,000
November	2,724,000	1,000	820,000	1,722,000	7,620,000
December	2,699,000	1,000	917,000	1,827,000	7,576,000
1926 Total	32,293,000	33,000	9,438,000	22,565,000	.....
January, 1927	2,570,000	81,000	864,000	1,496,000	7,867,000
February	2,345,000	.....	620,000	1,231,000	8,361,000
March	2,754,000	149,000	895,000	2,334,000	8,035,000
April	2,615,000	1,000	763,000	1,712,000	8,176,000
WAX (Pounds)					
January, 1926	53,015,000	632,000	29,061,000	18,204,000	122,773,000
February	50,307,000	668,000	28,709,000	21,075,000	123,964,000
March	55,714,000	456,000	25,005,000	24,788,000	130,341,000
April	55,371,000	647,000	31,560,000	18,715,000	136,084,000
May	56,135,000	213,000	23,968,000	19,068,000	149,396,000
June	50,673,000	833,000	27,300,000	18,348,000	155,254,000
July	54,267,000	2,089,000	30,768,000	24,138,000	156,704,000
August	54,441,000	968,000	26,906,000	20,142,000	165,065,000
September	49,228,000	252,000	29,303,000	25,463,000	159,779,000
October	56,011,000	1,384,000	28,365,000	20,884,000	167,925,000
November	54,678,000	674,000	25,164,000	21,059,000	177,054,000
December	55,950,000	1,189,000	28,410,000	20,452,000	185,331,000
1926, Total	645,790,000	10,005,000	334,519,000	252,336,000	.....
January, 1927	54,114,000	460,000	29,228,000	17,842,000	192,835,000
February	47,363,000	2,048,000	23,623,000	20,171,000	198,452,000
March	53,644,000	910,000	28,205,000	23,461,000	201,340,000
April	48,917,000	1,505,000	25,421,000	15,322,000	211,019,000
GAS and FUEL OILS (Bbls.)					
January, 1926	28,981,000	863,000	3,612,000	.....	*23,266,000
February	27,094,000	1,585,000	3,190,000	.....	*21,445,000
March	29,824,000	947,000	2,345,000	.....	*20,037,000
April	29,029,000	1,148,000	3,475,000	.....	*19,788,000
May	30,380,000	1,368,000	2,735,000	.....	*20,858,000
June	29,130,000	1,856,000	3,370,000	.....	*22,554,000
July	31,461,000	1,485,000	2,427,000	.....	*25,696,000
August	31,154,000	1,629,000	3,582,000	.....	*26,500,000
September	30,698,000	817,000	2,750,000	.....	*27,151,000
October	32,444,000	857,000	2,015,000	.....	*26,376,000
November	31,624,000	1,111,000	5,020,000	.....	*26,859,000
December	33,376,000	764,000	3,830,000	.....	*24,898,000
1926 Total	365,195,000	14,430,000	38,351,000	.....	.....
January, 1927	32,936,000	660,000	3,732,000	.....	*23,195,000
February	30,185,000	1,053,000	3,812,000	.....	*22,099,000
March	32,377,000	525,000	3,657,000	.....	*22,561,000
April	31,856,000	805,000	3,325,000	.....	*23,732,000

*These stocks for east of California only.



CONGRATULATING

Captain Charles Lindbergh

on his heroic achievement

Bethlehem Alloy Steel Forgings used in Lindbergh's Engine

The following parts, made of Bethlehem Alloy Steel Drop Forgings, stood the test with Captain Lindbergh:

Master Connecting Rod
Articulated Connecting Rods
Inlet and Exhaust Cam
Inlet and Exhaust Valve Rocker Arms

These parts were forged from 3½% nickel and nickel-chrome alloy steels.

◆ ◆ ◆

GOLD MEDAL AWARDS received by Bethlehem at the recent Sesqui-Centennial Exposition, Philadelphia, in recognition of the high quality of Bethlehem Alloy Steels and Drop Forgings, are further evidence of the excellence of these products.

With the indomitable courage of a true hero and with profound faith in the excellence of the Wright engine which propelled his Ryan plane, Captain Charles Lindbergh made his epochal non-stop flight from New York to Paris.

During every minute of his journey, through sleet storm and under maximum engine stresses, Captain Lindbergh's successful trip, and probably his life, depended upon the perfect functioning of all motor parts.

Bethlehem drop forgings are a part of this famous engine. They did their work efficiently and proved again the excellence of quality and workmanship of Bethlehem products.

The Bethlehem organization is happy to have contributed to the success of Captain Lindbergh in his epochal and heroic accomplishment.

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General Offices: BETHLEHEM, PA.

DISTRICT OFFICES:

New York Boston Philadelphia Baltimore Washington Atlanta Pittsburgh
Buffalo Cleveland Detroit Cincinnati Chicago St. Louis San Francisco
Los Angeles Seattle Portland

Bethlehem Steel Export Corporation, 25 Broadway, New York City, Sole Exporter of Our Commercial Products

BETHLEHEM

Pennsylvania Oil PLUS

Plus what?—Plus the fact that it is blended from 450 Bright Stock (Sharples Process) refined in ONE Freedom plant—and from 100% Pennsylvania Crude Neutrals refined in ANOTHER Freedom plant.

Thus, under *one* supervision, with the *one* guarantee of a 48-year-old refinery, a 100% Pennsylvania Motor Oil is blended to YOUR specifications — or a complete line of oils can be furnished — an oil or a complete line of oils that enable you to get business and to HOLD it.

Guaranteed 100% PURE PENNSYLVANIA OIL

For forty-eight years, The Freedom Oil Works Company has specialized in the refining and blending of 100% Pennsylvania Oils. In one way, that explains why jobbers the country over come to this concern for their requirements.

Deliveries can be made immediately, in tank cars, compartment tank cars, barrels, or drums. Write for quotations.

Also available for immediate shipment

450 Bright Stock (Sharples Process) which requires less neutral to blend to the ordinarily required specifications.

Freedom Quality Stocks
600 Steam Refined
635 Steam Refined
650 Steam Refined

Freedom 300 Mineral Seal Oil made to Railroad Specifications.

Freedom Filtered Burning Oils.

The Freedom Oil Works Company
Freedom, Penna.
Established 1879
Refineries at Freedom and Coraopolis, Pennsylvania

FREEDOM

Crude Oil Stocks - By Months

(Thousands of Barrels)

1926	East of Calif.	†In Calif.	Total U. S.
January	291,400	130,841	422,241
February	287,975	131,638	419,613
March	287,710	131,678	419,388
April	286,208	124,290	410,498
May	284,009	125,359	409,368
June	281,432	122,794	404,533
July	278,184	121,344	399,528
August	277,486	119,893	397,379
September	277,771	117,964	395,735
October	277,014	117,928	394,942
November	277,099	117,497	394,596
December	278,077	118,131	396,208
1927			
January	278,972	118,988	397,673
February	285,458	117,410	402,868
*March	290,110	117,454	407,564
April	297,681	117,843	415,524

†Includes heavy fuels. *Revised.

stocks April 30, 45,810 barrels, were 11,333 barrels larger than March 31 stocks.

A comparison of the bureau's statistics with the statistics from 124 Mid-Continent refineries collected by NATIONAL PETROLEUM NEWS, indicates the 124 plants moved their gasoline faster in April than the non-reporting plants in that region.

The N.P.N. figures for the four weeks ended April 29 give gasoline production as 136,669,000 gallons, or for a 30-day month at this rate 146,430,000 gallons. This was 60.3 per cent of the bureau's gasoline output figure, 242,802,000 gallons, for the entire Mid-Continent.

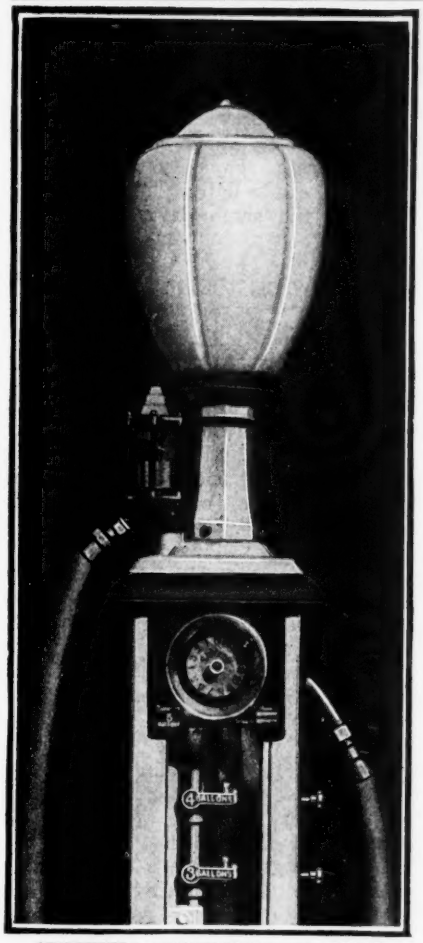
Stocks of gasoline at the 124 refineries April 29 were 101,309,000 gallons or only 43.1 per cent of the 234,990,000 gallons held in the entire Mid-Continent field April 30, the date the bureau's figures cover.

Output of kerosene was curtailed less than 1 per cent and shipments were increased 1.84 per cent, causing a small draft on stocks. Stocks of kerosene were 24.4 per cent larger April 30, 1927, than stocks April 30, 1926. Stocks in the Oklahoma-Kansas district were more than doubled in the year, which accumulation probably accounts for fall in price from 8 cents a gallon for 41-43 water white April 26, 1926, to 4.125-4.25 cents May 2, 1927. Only in California were stocks lower this year than last.

Production of lubricating oils was 1.88 per cent less in April than in March and shipments were 17 per cent less. Stocks April 30, 1927, were 141,000 barrels more than on March 31 and 808,000 barrels more than on April 30, 1926.

Lube output was curtailed in April in the East Coast, Appalachian, Indiana-Illinois and Texas districts. The largest increase in output was in the Louisiana Gulf Coast region. Shipments were larger in April than in March from the Appalachian, Oklahoma-Kansas and Louisiana-Arkansas districts.

Production of fuel and gas oils was curtailed in only the East Coast and Rocky Mountain districts. East of California shipments were larger in April than in March in only the Oklahoma-Kansas and Louisiana-Ar-



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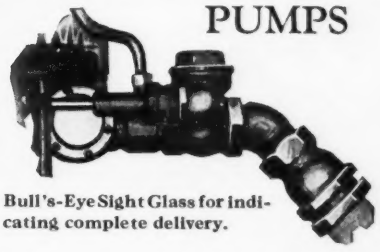
Makes Blind Pumps Visible

An outstanding feature of our famous Ringbell Pumps—attractively designed, handsomely finished. Hose is suspended from the bottom of the See-Gage thus eliminating the possibility of glass breakage. Nickel plated agitator shows passage of gas through the See-Gage and the specially designed glass cylinder displays liquids and gives at all times an unobstructed view of the proper level of the gasoline. Equipped with vacuum vent valve which guards against leakage.

BULL'S-EYE *for* VISIBLE PUMPS

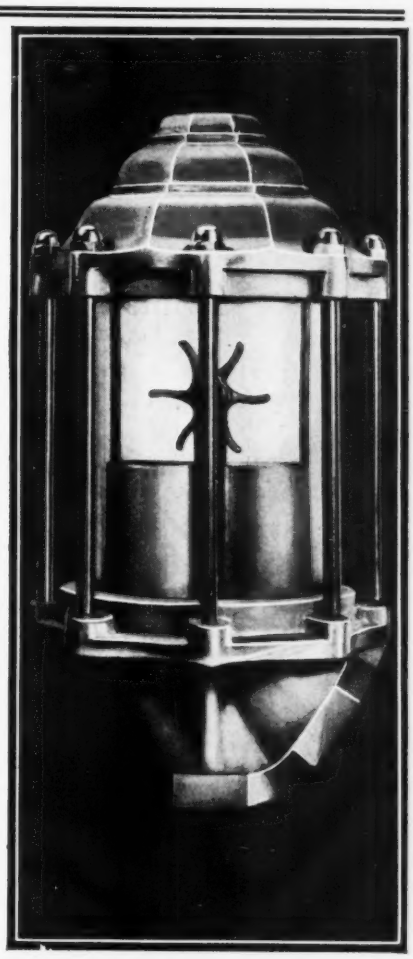


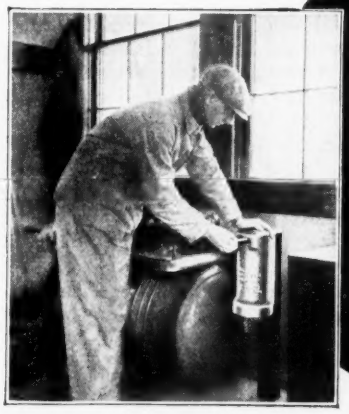
Bull's-Eye Sight Glass for indicating complete delivery.

Send for your copy of our descriptive folder covering our entire line of **BALL BEARING PUMPS**

Shotwell Pump and Tank Company

BOSTON INDIANAPOLIS





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FLEET-WING GASOLINE
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Knocks out that "knock"

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SWEETLAND Filters are responsible for making the contact process practical.

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kansas districts. Shipment figures for California are not available. Stocks were reduced in only the Rocky Mountain district.

The 329 refineries that reported, were operating at only 77 per cent of their rated capacity of 2,907,000 barrels of crude daily. The operating rate was the same as in March.

Markets New Line Of Motor Oils

TULSA, June 13.—Beginning about June 15 the Mid-Continent Petroleum Corp. (formerly Cosden & Co.) will begin the distribution of a new line of branded motor oils in addition to its present lines. The new oils will bear the name, "Diamond Motor Oils."

Diamond motor oil is an entirely new product in appearance, specification and method of manufacture. It is now being produced in quantity at the company's 35,000 barrel Tulsa refinery after an extended period research and test.

In color the oils of all grades are much lighter than the usual paraffine base oils now on the market. The lighter grades approach the color of the Gulf coastal oils closely. The heavier grades are a clear orange color which the company expects to feature as a "flame color" in its advertising. The outer tone is the characteristic green of oils made from paraffine base crude although somewhat lighter than usual.

In building the new oil the company engineers took into account the present tendency to increase the speed of automobile motors with consequent higher operating temperatures and more severe lubricating conditions. It was the idea of the company to manufacture an oil now with such a wide factor of safety that it will give satisfactory lubrication in motors which may be designed in the future presenting an even more exacting problem.

Exact specifications of the new oils have not been announced by the company. A guarantee is made, however, that each grade will meet the maximum standards of the Society of Automotive Engineers. The maximum required by this society will be set up as a minimum for the refining department in manufacturing the oils.

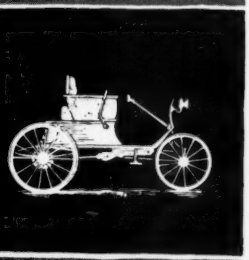
Diamond motor oil light will meet the maximum specifications of S.A.E. oil No. 10, medium will meet S.A.E. No. 20, medium heavy will meet S.A.E. No. 30, heavy will meet S.A.E. No. 40, special heavy will meet S.A.E. No. 50 and extra heavy will meet S.A.E. No. 60.

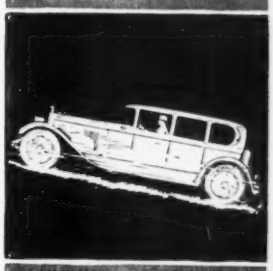
The new oils will be sold exclusively in packages. Barreling plants will be maintained at Louisville, Ky., St. Louis, Dubuque, Ia., and St. Joseph, Mo. as well as at the refinery from which less than car load ship-

Automobiles have improved

but—

what about gasoline?





IT IS a far cry from the "horseless buggy" of yesterday to the automobile of today. But the first cars and the latest cars are alike in one fundamental respect: *both depend on gasoline for fuel.*

Gasoline is not a perfect fuel. It has always had one inherent fault. It explodes too quickly ("knocks") as temperature and compression increase.

Carbon increases both temperature and compression beyond the point at which the present day automobile is designed to operate efficiently on regular gasoline. And the full efficiency of the modern motor car and its continued development have both depended upon the discovery of a *"knockless" fuel.*

After eight years of experiment, General Motors Research Laboratories developed Ethyl brand of anti-knock compound, a chemical ingredient which leading oil companies are mixing with their regular gasoline to form *Ethyl Gasoline.*

Ethyl Gasoline is *the* efficient fuel for automobiles of today and tomorrow. This super-gasoline will give your engine a performance such as you have never known. It is available throughout the United States and Canada and is sold at pumps which display the "ETHYL" trademark. Try it today.

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The Biggs Boiler Works Co. Akron Ohio

Bulk Storage and Station Tanks

FORTY years successful experience; plant fully equipped for fabricating plate up to 1½" thick. Your specifications and inquiries are invited.

Pressure Stills for Cracking Process - Fractionating Towers - Dephlegmating Towers, Bubble Towers - Heat Exchangers - Agitators - Steam Stills - Crude Stills - Condenser Boxes, Run Down Tanks - Blending Tanks - Hemispherical Tanks - Blow Cases - Acid Tanks, Compounding Kettles - Storage Tanks to 80,000 Barrels - Smoke Stacks and Breechings, etc.

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NAPHTHA
GAS OILS
PARAFFINE WAX
ASPHALT

Fuel Oil--Lubricating Oils

CYLINDER ENGINE
CORDAGE

RED AND PALE PARAFFINE OILS

ments will be made to jobbers.

Distributors handling the new line of oils will be given exclusive territory under a license arrangement. These licenses will be for a definite period with renewal privilege. Selling aids will be furnished in the form of signs of all sorts and local advertising in the distributor's territory.

A second line of oils will be made under the trade name, "M. P. C. Motor Oils." These will be red oils of standard quality but not specially processed as the Diamond brands. The company will continue to offer the former full line of pale and red oils and cylinder stocks for jobbers and compounders who have been customers in the past and built up their business on these oils.

Along with the new merchandising policy of the company, changes are being made in the sales organization. The general sales offices will be at Tulsa under the direction of D. W. Moffitt, vice president in charge of manufacturing and marketing. Outside sales offices will be operated as division sales offices. Diamond motor oils will be the only line handled at Mid-Continent stations operated under the management of T. M. Martin whose headquarters are at St. Louis.

Stutz Uses Ribbon Oil In Endurance Test

INDIANAPOLIS, IND., June 13.—A half page newspaper advertisement was used by the Denham Oil Co. here to "tell the world" that its Blue Ribbon motor oil was used by the Stutz Motor Car Co. in the 24-hour endurance test at the Indianapolis motor speedway on April 21 and 22.

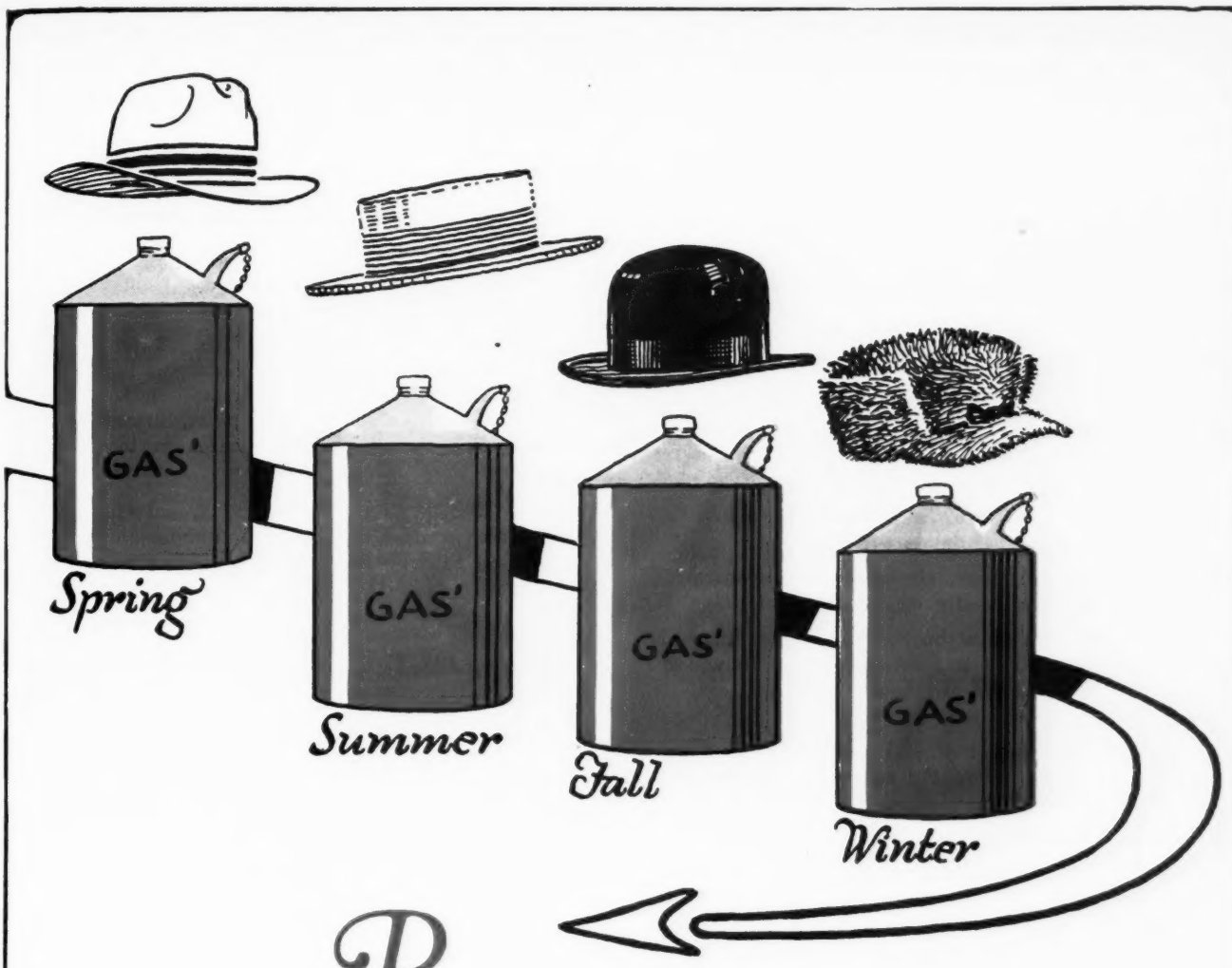
A letter from E. S. Gorrell, vice president of the Stutz company, giving due credit to the motor oil for its part in the success of the endurance test, is the text of the advertisement. The letter testifies that toward the finish of the test the motors were running sweeter and smoother than at the start and that the best time was made at the finish. The letter further states:

"During the entire run not a wrench was put to the engine, clutch or transmission. As a matter of fact inspection plates were not removed—not a spark plug was changed.

"We all feel that Blue Ribbon motor oil was a contributing factor in placing Stutz cars in the enviable position as the fastest strictly stock car in America."

Girl Arrives at B. G. Shepard Home

KANSAS CITY, KAN.—Miss Sally Ellen Shepard was born to Mr. and Mrs. B. G. Shepard on May 21. Weight was 8 pounds and 13 ounces, says Roy E. Spear, sales manager of the Inter-State Oil Co. here. Mr. Shepard is president of the Inter-State company.



PRESSURE Gasoline *will* deliver more power — that's undisputed.

But — the ordinary pressure gasoline, due to its greater volatility in hot weather, means fewer miles per gallon to the motorist.

Kanotex has solved this problem of mileage with Kant-Nox Gasoline, through a varied blending process that enables us to provide a separate grade for each season — Spring, Summer, Fall and Winter; thus increasing mileage under all weather conditions.

KANT-NOX GASOLINE

is the unequalled pressure fuel, not only for that reason, but also because

1st. Kant-Nox, on actual test, showed a power output equal to a 40% Benzol blend, and 10% greater than a straight run gasoline.

2nd. Kant-Nox shows a gum content far below that of the average pressure gasoline.

3rd. Kant-Nox is filtered in the vapor phase, instead of being treated with acids. This accounts for its freedom from tarry compounds and its color stability; also for its high anti-knock value, in excess of 25% Benzol Equivalent. Acid treatment removes a large percentage of the anti-knock compounds from ordinary pressure gasolines.

If you want more satisfied customers — sell them Kant-Nox the premier Motor Fuel.

"*There's a great future for the Kanotex jobber and dealer.*"

Write, wire or phone us for further information.

The Kanotex Refining Co.

Arkansas City Kansas

Phone KANOTEX **LD 4**

Visiting Around the Refineries

By Paul Truesdell

National Petroleum News

New Get Ready To Fuel Airplanes

THE American refiner met the demand of the automobile for gasoline and lubricating oil and in keeping himself abreast of that enormously growing demand learned his job so well and improved his efficiency so much that he is now in shape easily to meet the demand of the airplane, which I believe he will presently have to do. Let me do a little predicting.

From now on, transatlantic flights by hardy and adventurous aviators will be almost commonplace.

Within two or three years, airplanes will be operating across the ocean commercially on regular schedules.

Within two or three years, business executives and professional men whose time is sufficiently valuable will do most of their traveling by airplanes. Rich men will fly more and more as a sporting proposition.

The airplane, beginning now will enter a period of development paralleling that of the automobile which started 15 years ago.

Because:

The feat of Lindbergh and the honors he won have fired American boys with an enthusiasm for flying which they never had before. It is said the air mail service is being flooded with applications for pilots' jobs. Transatlantic flying is like channel swimming. Only four or five men had swum the English Channel in history until Gertrude Ederle did it. After that half a dozen men and women accomplished it within a few weeks.

The flights of Lindbergh and of Chamberlin showed the reliability and stanchness of the modern plane. The papers say Packard has brought out a new airplane engine able to do better than 300 miles an hour.

Colonel Stewart of the Standard of Indiana, one of the outstanding executives of the country, by flying with five of his officers and directors from Detroit to Chicago in a plane bought by the company for business use, certainly testified to his faith in flying and did much to convince the business men of the country of its safety.

The airplane is the greatest saver of time in history and time is life.

General use of airplanes will put consumption of gasoline on a new scale, because the average consumption in flying is about a barrel an hour. Oil consumption is high, too. Even 100,000 airplanes flying every day would make quite a difference in the demand for gasoline. And airplanes will demand a higher anti-knock quality in gasoline than the automobile.

I offer these predictions for what they are worth.

New Method of Cleaning Reaction Chambers

A NEW way of cleaning the coke out of Cross reaction chambers has been put in effect at the Heath, O., refinery of the Pure Oil Co., according to the June issue of Pure Oil News. The work is now done by water pressure and it is said the cleaning-out time has been reduced from 10 or 15 hours to five hours.

Superintendent R. D. McClaran of the refinery is given credit for the improvement. It is also stated in the Pure Oil News that considerable experimental work is being done on the Cross stills at that plant, increasing the throughput with corresponding increases in temperature and pressure.

Mr. and Mrs. McClaran on May 12, entertained the plant foremen at a chicken dinner. Shipments of gasoline from the refinery in April were 854 cars, a record for the plant, it is stated.

Juggling 120-Ton Forged Soaking Drums

A CONSIDERABLE engineering feat has been put across in the installation of five of the new soaking drums for the Tube and Tank cracking process at the Montreal refinery of Imperial Oil Ltd., according to Imperial Oil Review, the company magazine. These are hollow steel forgings, weighing 120 tons apiece. The problem was to hoist them from a horizontal position on flat cars and stand them on end in their proper operating positions. They perform a similar function to the "reaction chambers" in Dubbs and Cross plants.

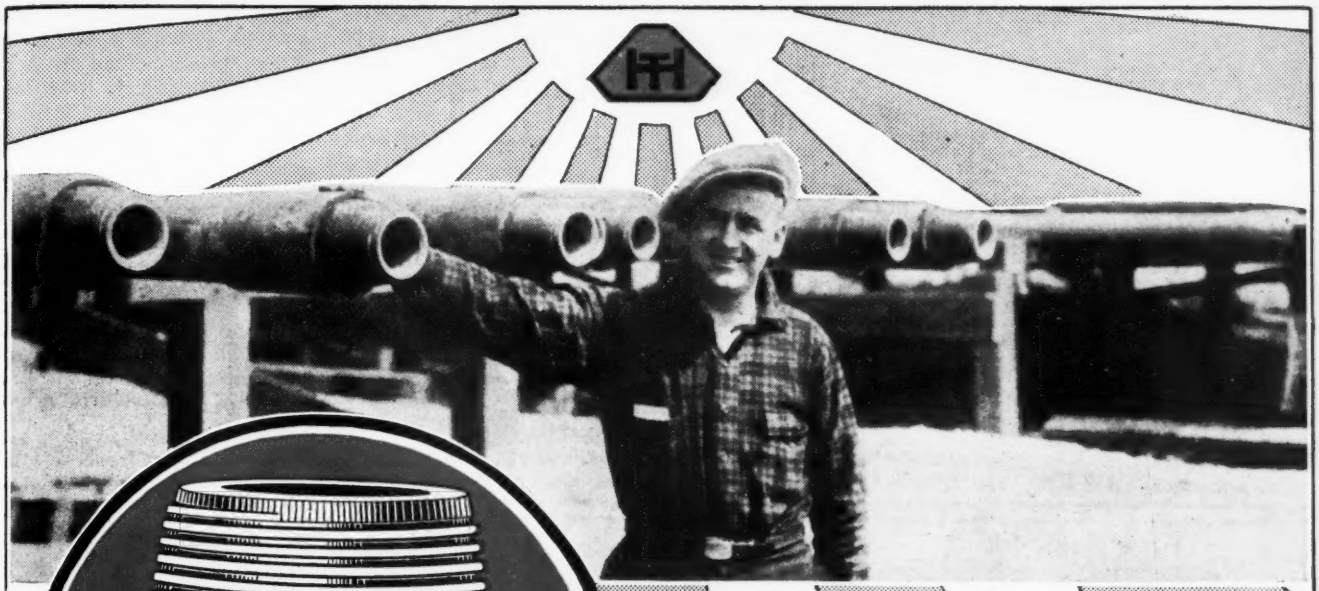
The work was done under the supervision of F. C. Mechin, superintendent of the refinery, and Charles Abrams, and was accomplished without accident.

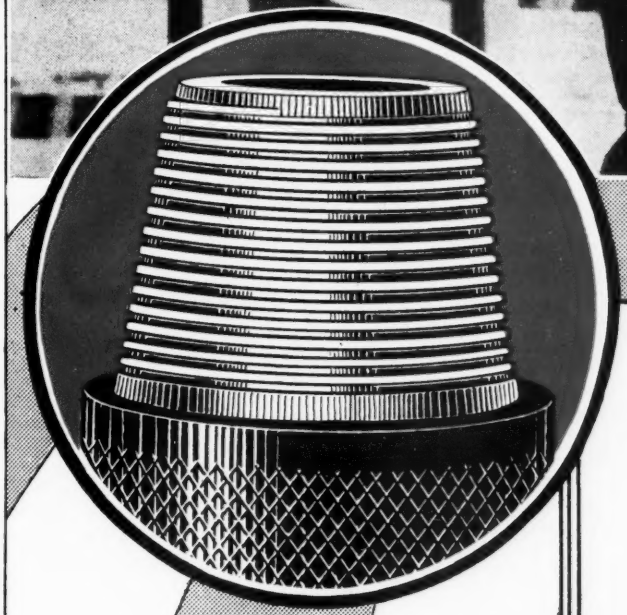
A feature of the new cracking plant which, according to Imperial Oil Review is unique, is the method used for cleaning coke out of the soaking drums. Under each drum a hole was drilled by an expert driller, and cased. In this casing runs a hydraulic plunger, which runs up through the center of the bottom of the drum. The head of the shaft apparently is fitted with some kind of cutting and reaming device, so that when the drum is shut down for cleaning, the hydraulic mechanism is set in motion and the cutter travels upward to the top of the drum, cutting out the coke.

Special flat cars were necessary for shipment of the drums from the steel plant where they were made to the refinery.

Shale Oil Refinery Closes Down

WHATEVER the future of the shale oil industry may be, it appears that it cannot operate now in England in competition with the crude oil refining industry which is represented in England chiefly by the Anglo-Persian Oil Co. Word comes that the Broxburn Oil Co., Broxburn, West Lothian county, Scotland, will permanently close its mines and shut down its oil refinery. Some other Scottish oil companies, which were absorbed some years ago by the Anglo-Persian, have been closed down as shale oil plants and are understood to be operating, in part at least, on crude petroleum.





No. 3 of a series of informative advertisements on the manufacture of the Hughes Tool Joint. We believe it costs more to manufacture a Hughes Joint than any other joint on the market.

AFTER BEING THOROUGHLY ANNEALED

Every

HUGHES TOOL JOINT FORGING

is machined to finished dimensions—great care being exercised to preserve alignment and concentricity of threads with respect to the body of the joint.

"Sold by supply stores—Everywhere"

HUGHES TOOL COMPANY

Service Plants
Los Angeles, Calif.
Oklahoma City, Okla.

Main Office and Plant
HOUSTON
TEXAS

Export Office
New York City

New Equipment to Improve Plants

Personal Notes of the Manufacturers

National Petroleum News

Henry H. Brigham, president of the North American Car Corp., Chicago, has built a public library in the town where he was born, Sharon, Wis., in memory of his father, the late Rev. George F. Brigham who for many years was pastor of the Episcopal church of Sharon.

* * *

Chicago Bridge & Iron Works, Chicago, announces that the White Star Refining Co. of Detroit has ordered four gasoline storage tanks 20 by 20 feet for installation at the White Star bulk plant at Charles and Mt. Elliott sts., Detroit.

* * *

General Electric Co., small motor division, industrial department, West Lynn, Mass., has put out as Motor Dealer's Power Manual Section PM-7162, "The Mechanical Installation of Electric Motors and Control." This booklet should be valuable to a plant engineer whose duties include the installation of motors. Every possible method of mounting motors is described and illustrated with drawings and photographs.

* * *

Business in France is booming and promises this year to surpass during this year all records made during 1926, according to J. B. Farwell, foreign manager of the Worthington Pump & Machinery Corp., at Paris. Mr. Farwell is in New York for a three week conference with L. J. Belnap, president of the Worthington company.

* * *

Lincoln Electric Co., Cleveland, O., announce that the Big Three Welding & Equipment Co. of Fort Worth and Houston, Texas and Oklahoma distributor for Lincoln Stable-Arc welders, has opened its third warehouse branch at 1 North Frankfort st., Tulsa.

* * *

A new method of heat-treating steel to increase toughness and strength is used by the Walworth Co., Boston, in the manufacture of its Stillson pipe wrenches.

Uniformity in quality and in annealing the drop forged parts, and maximum strength are secured through a new electric annealing system which has been installed at the company's plant under which every wrench is given precisely the same treatment of slow heating and cooling. A new battery of heat-treating furnaces has also been installed, through which the wrench passes in its cycle of heat-treatments designed to develop to maximum of toughness and strength in the bars and jaws.

* * *

Revolvator Co., Jersey City, N. J., has just put out Bulletin 91-A describing and illustrating its arc welded revolvable base for lifting and handling heavy loads.

* * *

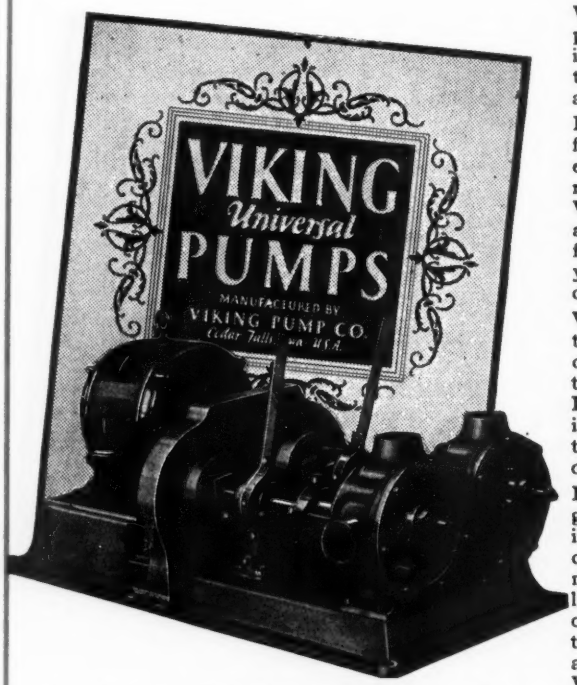
Blaw-Knox Co., Pittsburgh, has put out an illustrated booklet describing its inundation system of mixing concrete. The system provides for mechanical control of water-cement ratio and produces concrete of uniform quality.

Movie Based on Refiner's "Ads"

Los Angeles.—The employes of the Richfield Oil Co. here attended in a body the premier showing of the Reginald Denny picture "Fast and Furious" on June 1, the plot of which picture is based on the success of the "Smithfield Oil Co.", purveyor of motor fuel to championship racing automobiles, and features the three dimension speed group statues the Richfield company uses as roadside advertising in California.

The Richfield company claims to be the first to adopt the three dimension road signs. The statues are the work of sculptor Finn Haakon Frolich.

Simplify your pump buying—
Think *first* of the genuine VIKING



When it comes to the purchase of pumps, there is a direct course to take that saves waste motion and mistakes.

Investigate the Viking first. You will find an exact type that meets your needs. Further, the Viking you select will assure a certainty of performance that involves years of faithfulness and dependability.

Viking sales representatives and distributors are conveniently situated throughout the country. Detailed and authentic information is easy to obtain. Why not make use of it?

Remember, only the genuine Viking has the improved Rotary Principle. With but two moving parts, there is little wear and a minimum of repairs. Positive suction and even flow insure a greater capacity. The Viking costs less to operate—does more work—has practically no maintenance cost and lasts for years.

The Viking pump ***will not leak.*** It ends the daily waste in this manner—which if continued for long soon levies a heavy penalty.

High capacity at low cost is possible with the Viking since any of the 2-inch outfits will unload an 8,000 gallon tank in 1½ hours.

Why not write now for our large, illustrated catalog? It contains facts and information that apply especially to your demands.

VIKING PUMP COMPANY

Cedar Falls, Iowa — Walkerville, Ontario Canada,

VIKING PUMPS

You lose *from* 2 *to* 8 barrels on *every* car loaded *without a* Universal Gastite Dome Cover. *Figure* the number *of* cars you load *each* year -multiply your loss *and* you will know *how much* actual cash *a* Universal Gastite Dome Cover *will save* you. One refiner *saved* $125,000 *in* 17 months/ *In* addition *they give* Positive Protection *against* inclement weather *and* eliminate danger of explosion~~~

Take advantage of these economies~ Write for full information

UNIVERSAL *Gastite Dome Cover*

PATENTED OCT. 14, 1924

A.Y. McDONALD MFG. CO.

Dubuque, Iowa

OMAHA MINNEAPOLIS DES MOINES KANSAS CITY

"The Home of the Swing Joint"

McDONALD

"DEFIANCE"

INTEGRITY

Buy your barrels at as low a figure as you can, but be sure you are getting full value.

Specifications cover the materials put into a barrel but they do not apply to the men behind the barrel.

Almost anybody can roll up a sheet of steel, weld it together, stamp their initials and the gauge steel on the end and call it a barrel.

But it takes integrity as well as skill to turn out a shipping package like the Defiance Steel Barrel.

You get your money's worth in a Defiance Steel Barrel.

THE AMERICAN STEEL PACKAGE CO.

Defiance, Ohio

Certified All Pennsylvania Blending Oils

For Reasonably Prompt Shipment

150 @ 70	3-4 Color
180 @ 70	4-5 Color
200 @ 70	4-5 Color

Guaranteed 100% PURE PENNSYLVANIA OIL

West Penn Oil Company

Permit No. 515 *Wire-Write-Phone* Warren, Pa.

Wiping Windshields Cause of Accidents

Staff Special

TULSA, June 9.—Wiping off the windshield of a customer's car at a service station would not appear to be a dangerous occupation. Yet a number of service station salesmen have received painful injuries while performing this little service, according to E. M. Hearne of the safety department of the Marland Refining Co.

In a recent article in the Marland Service Man, Mr. Hearne stated that more accidents have happened at Marland stations through customers closing car doors on the hands of men wiping windshields than any other single cause. Another source of accidents is the inflation of tires. Old casings may blow out while air is being added with danger to the eyes. Last year one Marland man suffered a broken leg when the rim flew off of a wheel while air service was being given. Another salesman's nose was almost cut off in a similar accident.

New Tanker for Service On Great Lakes

CHICAGO, June 9.—Standard Oil Co. of Indiana is enlarging its fleet of tankers. The third new ship will be placed in commission about this time next year, according to Beaumont Parks, who has charge of water transportation. The new tanker has just been ordered and is being built by the Lorain yard of the American Shipbuilding Co.

The new ship will be a duplicate of Standard Oil Co's. tanker "Renown" already in service. The Renown is 390 feet long, 52 feet in the beam and 25 feet deep, having a capacity of two million gallons of gasoline. Like the Renown the new ship will be steam propelled. Standard's other tanker in service on the Great Lakes is the W. P. Cowan. Besides these ships the company owns a sea-going tug.

New Marketer To Erect Stations

Baltimore, Md., June 7.—The first of several service stations which will be built by the newly organized Baltimore County Oil Co. here, is now being erected at Pikesville, Md.

Harold F. Brown is president and William R. Howard III is vice president and manager.

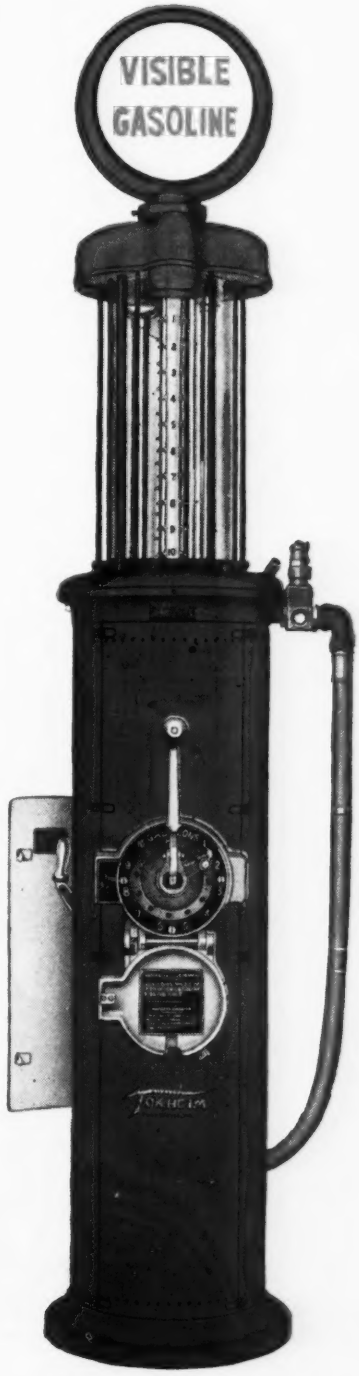
The company has its headquarters in the Munsey Bldg., here.

Bradford, Pa.—Frank Philippbar, lubricating engineer of the Kendall Refining Co. here, married Miss Angeline Wiles of Bradford on May 28. Mr. and Mrs. Philippbar are honeymooning in the Adirondacks and will make their home at Bradford.

★ exact measure —in the cylinder first!

Compensator Tubes

☆ ***An exclusive Tokheim feature designed to permanently correct glass cylinder cubic inch variations.***



Positive Mechanical Accuracy Begins in the Glass Cylinder

No two glass cylinders on a visible gasoline pump can be alike! Imperfections in the blowing process cause that. One cylinder might hold 10 gallons and 5 cubic inches; another might hold 10 gallons and 9 cubic inches. To the naked eye they're alike as two peas, yet always there is a cubic inch variation.

Tokheim corrects this variation by the use of two unique compensator tubes in each cylinder so that every cylinder holds 10 Exact gallons—no more, no less. These compensator tubes permanently correct glass cylinder imperfections. There is nothing about them that can be broken; they always "stay put"; they never fail to function.

It's easy to understand, then, why Tokheim Cut 600-605 Master Control pumps are always mechanically accurate to the last drop—why each gallon is accurately metered and recorded up to 1,000,000 gallons and repeat—why the operation is wonderfully simple, speedy and highly satisfactory to owner and motorist alike. Address Department "M" for details.

QUALITY TOKHEIM Oil Tank & Pump Co.
Fort Wayne, Ind. U.S.A.

TOKHEIM
FILLING STATION EQUIPMENT

Tret-O-Lite
for treating
"CUT OIL"

is by far the most widely used process. 100% thorough, recovering *all* the oil. Lowest in equipment cost. Lowest in operating cost per barrel recovered. Simplest and most rapid of all methods. Our field engineers available for consultation without obligation.

Process Patented

WM. S. BARNICKEL & COMPANY
ST. LOUIS, MO.

Tret-O-lite
Reg. U. S. Pat. Off.

Get Your Share

of the Transmission and Differential Lubricating business by selling

STASO

the only nationally accepted Transmission Lubricant offered exclusively to jobbers for their use and resale.

Leading Motor Car Manufacturers use

STASO

the all-weather Transmission and Differential Lubricant. It will not channel.

Sell

STASO

and mak greater profits

Our Industry — A Page of Facts and Personalities

National Petroleum News

By Paul Wagner

A VETERAN ranchman's memory has resulted in his obtaining another fortune in west Texas. Jax M. Cowden, long active in Crane county, remembered something when the McElroy Ranch and University (Church & Fields) pools came into important operations. He recalled an excess between two property lines when the land was originally surveyed and staked off. Cowden made a proposition to J. E. Anderson, Austin attorney, and the last mentioned filed with the Texas land commission, February 3, last, on the strip. Afterwards, they transferred "the strip", 400 feet wide and about four miles long, to the Landreth Production Co. As told on page 75 of the May 11, 1927 issue of NATIONAL PETROLEUM NEWS, Landreth has now started a line fight for production on the strip separating the Gulf's McElroy ranch field on the south and the productive ground under divided ownerships in the University pool on the north. The scrap "to get the oil" had already resulted in the erection of 18 steel derricks on competitive locations at the time this was written; and fully that many more tentative locations have been already made.

* * *

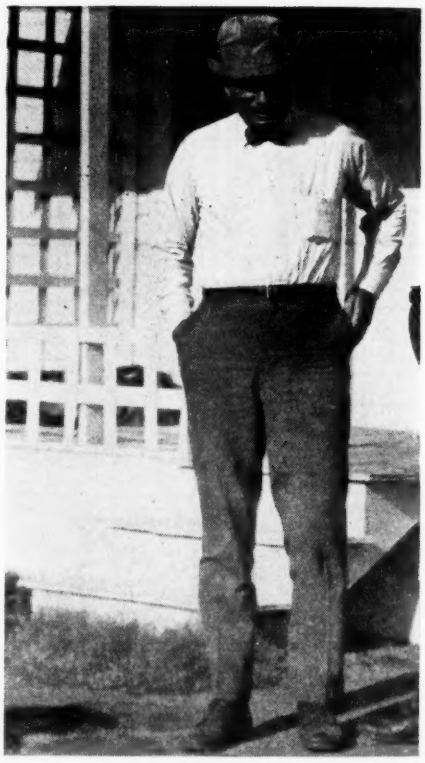
HORACE M. BAYER is now zone geologist of Gulf Production Co., with Midland, Texas headquarters, succeeding O. C. Harper, who recently resigned to become associated with Gault & Brown of Tulsa. Bayer was succeeded as zone geologist at Eastland by Al Nance, formerly a west Texas field geologist.

* * *

JOHNSON HILL and B. B. Blair, formerly vice presidents of the Waite Phillips Co., who resigned at the time the last mentioned company was sold to the Barnsdall interests, are now operating in the west Texas territory as the Tulsa Oil Co.

* * *

CLYDE M. BENNETT, vice president and general manager of the Louisiana Oil Refining Corp., Shreveport, has been elected president of the Trinidad Oil Fields, Inc., an allied interest. Mr. Bennett, who rose to executive status through land and geological work, was chief geologist of the Arkansas Fuel Co., in Shreveport territory, before joining the Louisiana Oil Refining Corp., about eight or nine years ago.



W. V. BOWLES

W. V. BOWLES, general superintendent of Gulf Coastal division producing operations of The Texas Co., dates his oil industry service from the days of original Spindletop development. From 1902-1905, he drilled for his uncle, Col. T. C. Stribling, who was an important figure in the early development of South Texas. Then Mr. Bowles began contract drilling. He continued this work until 1914, when he became field superintendent for the Beaumont Petroleum Co., in which he also owned an interest.

A year later found Mr. Bowles drilling for The Texas Co., at West Columbia, where afterwards the company brought in one of the important Gulf Coastal salt dome fields. He was advanced to assistant general superintendent in 1917 and was made division general superintendent in 1922.

Mr. Bowles was born at Houston, Miss., May 10, 1885, removing to East Texas with his father, W. J. Bowles, at the time of original Spindletop development. His father, who

died in 1920, operated sawmills in Mississippi and Texas, afterwards engaging in the oil business in Oklahoma.

* * *

THE McCamey, Texas, district offices of The Texas Co. have been equipped with a radio sending and receiving outfit in charge of W. C. Putnam and operated under license KSZ. Other southwestern oil companies operating radios on low wave lengths for business purposes include the Marland Oil Co., at Ponca City, and Phillips Petroleum Co., at Bartlesville.

* * *

PURCHASING agents of Dallas, at their recent annual election, named I. C. Jared, Sun Oil Co., president. B. R. Newberry, Lone Star Gas Co., became first vice president and Ferd Hicks, Mosher Steel & Machinery Co., second vice president. C. F. McAuliff, Texas Electric Co., secretary since the Dallas association was organized in 1920, was reelected. E. R. (Dad) Folmar, Magnolia Petroleum Co., retiring president, and John Babcock, Watson Co. were named national directors.

* * *

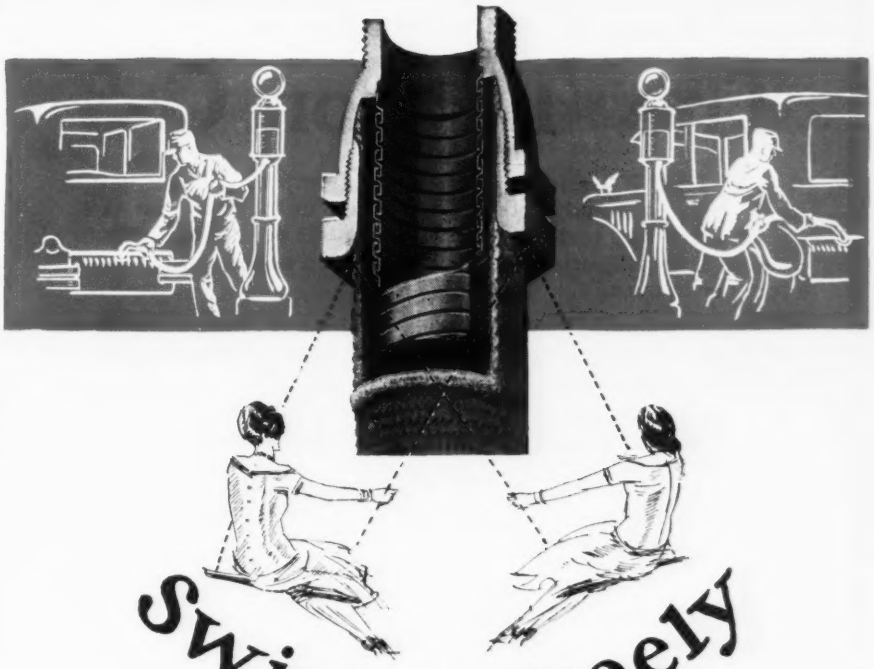
DISTRICT offices have been opened at Midland, Texas, by three additional companies associated with oil development in the part of the west Texas Permian basin served by the Texas & Pacific railroad. E. E. Goehring will represent Continental Supply Co. as district sales manager at Midland; J. A. Finlayson and W. L. McDermott, who owns the National Tank Co., with home offices at Breckenbridge, have moved to Midland to have personal charge of their west Texas business; and Frank Kemp, Halliburton Oil Well Cementing Co., Duncan, Okla., is in charge for his Company at Midland.

* * *

A. F. DENNISTON, veteran in the land department of Magnolia Petroleum Co., Dallas, is recovering his health at Marlin Springs, Texas, after an attack of pneumonia. Although for years a resident of Houston, where he has many friends, "Dad" Denniston has made Dallas his headquarters recently. He first saw service in the industry on Oil Creek, in the days of Pithole and Petroleum Center; also he was among the first on the scene at Spindletop in 1901. He has lived in Texas ever since.

* * *

E. H. STAFFORD, manager of the west Texas office of Mid-Continent Petroleum Corp., at Midland, recently escorted Tulsa headquarters officials over the general salt basin area. In the party were Jacob France, president; G. O. Moody, vice president and production manager; C. F. Beekley, chief geologist; and Judge C. H. Denton of the legal department.



Swings Freely

No Cutting Edge

If you have an ordinary coupling on your hose—90% of all your gas hose leaks occur at the coupling. Obvious, because every time you lift the hose for draining, a 1000 lb. metallic cutting pressure is exerted at the knife-like coupling collar. No hose can withstand it—leaks are inevitable.

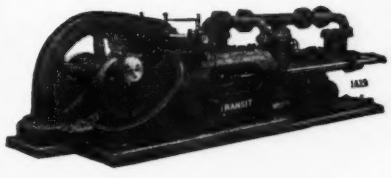
Because Rex Bell Coupling allows a *full free swing*, gasoline hose leaks are eliminated. It is two-part external coupling—a sleeve which bites into the hose as the Bell cap screws over it. The hose is firmly gripped at the end furthest in the coupling, *permitting free play* at the beveled bottom.

Rex Bell Couplings are used on our Rex Tube Gasoline Hose. Rex Hose is three ply, extremely flexible and fully guaranteed.

Rex Hose and Rex Bell Couplings spell continuous, unusual service. Try them and judge for yourself.

CHICAGO TUBING & BRAIDING CO.
260 N. Clinton St., Chicago, Ill.
Choice territories still available for live distributors.

TRANSIT PUMPS
for large and small pipe lines
Descriptions on Request.



NATIONAL TRANSIT PUMP & MACHINE CO.
OIL CITY, PA.
District Offices: New York, Pittsburgh, Tulsa, Cleveland, Houston and Denver, Philadelphia.

This is

The 'Dayton G-3

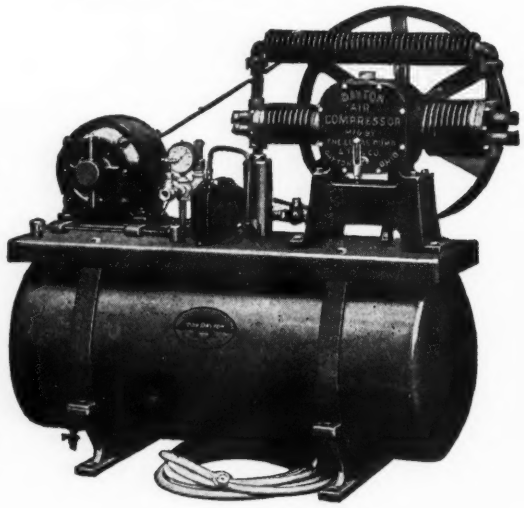
The "G" series of Dayton Air Compressors is a large and growing family, composing seven units from the G-1, with a capacity of 2¼ cub. ft. of clean air per minute, up to the G-8, an all-purpose compressor with a capacity of 8 cubic feet per minute.

The wide popularity of the G series is due to the fact that all of these units are built without connecting rods, crosshead pins, bolts, or cotter pins, that there, is practically nothing to get out of order or interfere with the constant furnishing of air at or above the rated capacity.

Dayton G-3

Has a capacity of 5 cubic feet of air per minute. Tank holds 56 gallons, motor is 1 H. P.

Adapted to medium size station, furnishing air to passenger cars and trucks.



TWO-STAGE AUTOMATIC AIR UNIT

Write to us, giving us an idea of what you expect of an Air Unit, whether needed merely for tire inflation or for combined purposes. We will then write you fully, stating which size and type is best adapted to your use. We want to give you all the air you need at the right cost.

The LUCAS PUMP & TOOL COMPANY DAYTON, OHIO.

DAYTON AIR COMPRESSORS

425 Valley St., Dayton, Ohio.

WHEN YOU WANT QUALITY AND REASONABLE PRICES

Mixed Carload in Drums—or Tank Cars

"INVINCIBLE" MOTOR OILS

100% Pennsylvania or Western Blends

To Match Any Oil Made

WRITE

A. D. MILLER SONS' CO.

Millers Oil Refining Works

PITTSBURGH, PENNA.

Oldest Pennsylvania Refiners

Comments From California

By W. E. Green
N. P. N. STAFF WRITER

CLYDE ELLWOOD, sales manager for Axelson Machine Co., has returned to Los Angeles headquarters after a 60-day trip through the east. He came home with the idea that the American oil man can work out his own problems—and that he will. Just give him time.

* * *

R. C. BAKER, president, haling from Coalinga, with T. Sutter, secretary, and R. G. Garretson, sales representative, all of Baker Casting Shoe Co. are touring the United States with special attention to oil fields in Texas, Oklahoma and the Rocky Mountain States. They will be away from home about 60 days.

* * *

STEPHENS (STEVE) BROOKS, president of the Brooks Engineering Co., Los Angeles, left California June 3 for a quick trip to Chicago, making a short visit at Cleveland to see his father. He plans to be away from the Pacific Coast just exactly 11 days.

* * *

H. MINARD MACOMBER is to become general field superintendent of the Turkish Petroleum Co. in the Iraq fields, sailing from New York June 15 on the leg of his long journey. Mr. Macomber had recently been field superintendent for J. Paul Getty in California, and is succeeded in this position by A. C. Bush. Mr. Macomber succeeds in his new position another California man, E. P. Weiman, who returns to California to give his full time to his manufacturing business established last year near Los Angeles.

* * *

THE name of Hillman will continue to be actively identified with the Standard Oil Co. of California, notwithstanding the recent retirement of Fred H. Hillman, veteran vice president, after 42 years of oil industry service. His son, Loren L. Hillman, is an executive in the producing department. The elder Hillman began his career in 1879 as a messenger boy of the United Pipe Lines at Bradford, Pa. He went to California in 1911 to take charge of production for the Standard at San Francisco.

* * *

LUTHER D. DIMM, after 35 years of service with the Standard Oil Co. since 1901 serving the company in California, retired from active service May 31, and was tendered a farewell luncheon at the El Segundo refinery

Distinctive Curb Standards

National Curb Standards are used by the leading oil companies because of their quality and artistic appearance.

Specializing in this line has placed us in the position of experts. We build superior Curb Standards of pipe or shapes in large or small quantities with or without advertising signs.

We also manufacture to specifications any type of piping or frame support for overhanging signs.

Write today, stating your requirements and ask for our attractive prices and descriptive literature.

NATIONAL PIPE PRODUCTS CORP.
Main Office and Factory
ROCHESTER, PA.

Chatterless Ford Oils

OUR invoice for base is an authorized license to manufacture and market a proportionate quality of the highest grade Ford Chatterless Oil under the Sorensen Patent U. S. P. No. 1414311.

Samples—trial shipment and prices on request.

A. J. Stevens Grease and Oil Co.

Kansas City **Missouri**

by officials and associates. He was presented with a gold watch and chain. Mr. Dimm first entered the employ of the Standard at Whittier, Ind., in 1890, coming to California in 1901 to serve as manager of the Richmond plant. For the past 8 years he has served as manager of the Standard's El Segundo plant. A. S. Russell, former chief engineer of the manufacturing department at Richmond, succeeds Mr. Dimm as manager of the El Segundo plant.

* * *

LATE in May, R. J. Eiche of London, connected with the oil well department of Vickers, Ltd., was in California looking over the fields and making a study of California field practices.

* * *

C. R. INGLE, well known in oil field circles in California, recently visited the Mid-Continent fields, and upon his return to Los Angeles assumed his new duties as general superintendent of drilling for the California Petroleum Corp.

* * *

J. T. HAYWARD, chief engineer of the Phoenix Oil & Transport Co., of Rumania, spent some two weeks recently in California visiting the various fields with Eddie Goeser and Chas. Wagner, vice president of the Emsco Derrick & Equipment Company, as guides. Mr. Hayward's company produces oil and also refines it.

* * *

F. F. CORBY, effective April 15 was appointed assistant to Vice President Albert Brown of the Oil Well Supply Co. of California, with headquarters in Los Angeles. Mr. Corby had been serving as Pacific Coast representative of the A. M. Buyers Co. and is well known to the oil fraternity.

* * *

WILLIAM CAMERON recently relinquished his position as superintendent of the Shell Co.'s refinery at Wilmington, Cal. and left for the London office of the Shell. Mr. Cameron plans on an extended vacation before returning to active service, and he will be re-assigned duties in some other country. Mr. Cameron has been in the employ of the Shell interests for many years, serving in Dutch East Indies and in other countries. He had been in California for about three years. F. H. Schippers, Mr. Cameron's former assistant, is now superintendent of the plant.

* * *

MARSHALL MOORE, formerly connected with the Panhandle Refining Co., at Wichita Falls, Texas, has joined the sales force of the Dunn Manufacturing Co., Ornard, Cal., and will handle the Southwest Central portion of Texas in his new position.

"Best Compressor Ever Used"
Say These Attendants

NORTH STAR OIL AND REFINING COMPANY
LIMITED
REFINERS AND DISTRIBUTORS
PETROLEUM PRODUCTS
REFINERY: ST. BONIFACE, MANITOBA
HEAD OFFICE WINNIPEG, MANITOBA

WINNIPEG
CANADA

April 14th, 192

Milwaukee Tank Works,
Milwaukee, Wis.

ATTENTION - Mr. A. J. Heilman

Dear Sir:-

Replying to yours of April 7th, we have four filling stations here equipped with the Milwaukee Compressor and each one of our attendants claim it is the best Compressor they have ever used. One particular point in its favor is that it stands our severe Winter climate without requiring any adjusting whatever.

Yours very truly,
NORTH STAR OIL & REFINING CO. Limited.
F. W. Deel
FWD:VS. General Sales Manager.

Built a Little Better

This Letter Proves It Pays

Stands Severe Winter Climate REQUIRING NO ADJUSTMENT WHATEVER

Write today for complete catalog of compressors, visible and piston pumps, etc. A fine popular priced line.

Type 600

MILWAUKEE TANK WORKS, Milwaukee, Wis.

MILWAUKEE TANK WORKS

F O U N D E D 1 9 1 1

ALLISON COUPON BOOKS

PLUS SOME SALES EFFORT ON YOUR PART, WILL GREATLY STIMULATE GALLONAGE DURING THE COMING MONTHS.

ALLISON COUPON BOOKS ARE GUARANTEED TO BE ABSOLUTELY ACCURATE.

Write for Samples and Prices

ALLISON COUPON CO. Indianapolis, Ind.

New Stations Built or Being Built

Little Rock, Ark.—Harry E. Isaacson will build filling station.

Fremont, Neb.—Shaffer Oil & Refining Co. will erect service station.

Warrensburg, Mo.—Shock and Hutchens will erect service station.

Cushing, Okla.—Thompson-Parker Lumber Co. completing filling station and garage.

Little Rock, Ark.—M. E. Miller to erect service station.

De Leon, Tex.—Mrs. R. P. Hendricks and Roy Shook are completing service station.

Stillwater, Okla.—Service stations will be erected here by Brewer Bros. and Lovell Bros.

Marshalltown, Ia.—Roxana Petroleum Corp. will build service station.

Eagle Grove, Ia.—Standard Oil Co. of Indiana building filling station.

Madison, Neb.—J. B. Gaffney is completing service station.

Cedar Falls, Ia.—W. S. Houck, A. M. Andrews and Elmer Thierman are each building a filling station here.

Brownsdale, Minn.—A. S. Higley will erect filling station, handling Sinclair products.

Glencoe, Minn.—James Navratil is completing service station.

Fall River, Mass.—A service station will be erected here by Crosson & Dutton, which will be operated by Webb Oil Co.

Providence, R. I.—Thirteen service station permits have recently been sought here. They are: four by Standard Oil Co. of New York; Schact Motor Truck Co.; Antonio Jackvony; Arthur Abrich; Cornelius Moran; George D. Lawton; William H. Haigh; Sarkis and Setrak Messerlain; Pasquale DeChiara; David S. Kniznik.

Guthrie Center, Ia.—Manhattan Oil Co. building service station.

Washburn, Wis.—Standard Oil Co. of California will build service station.

Canova, S. D.—John Daniel, of the Daniel Motor Co., will erect filling station and garage.

Litchfield, Minn.—Penn America Oil Co. will erect filling station.

Hopkins, Minn.—Pure Oil Co. will build filling station.

Laredo, Tex.—J. A. Ortix will build filling station.

Del Rio, Tex.—M. J. Diego will build filling station.

Bismarck, N. D.—Red Trail Oil & Transfer Co., Mandan, N. D., is building service station.

Lakefield, Minn.—Standard Oil Co. of Indiana will erect service station.

Easton, Md.—J. Hall White will build filling station.

Emmetsburg, Ia.—Armstrong Oil Co. building service station.

Humboldt, Ia.—Standard Oil Co. of Indiana building service station.

Greenwich, O.—Standard Oil Co. will build filling station.

Portsmouth, O.—Refiners Oil Co., Dayton, O., will build filling station.

Bellaire, O.—Du Bois Oil & Gas Co. will build service station.

Ashland, Ky.—Standard Oil Co. of Kentucky is completing service station.

Jeannette, Pa.—John M. Anthony will build filling station.

Oskaloosa, Ia.—Charles Dalbey is completing filling station.

Davenport, Ia.—Filling stations will be built by these at Davenport: Communities Service Station Co.; Hill & Fredericks; William Barnes; Dr. A. P. Donohoe; and August Becker.

Cherokee, Okla.—D. E. York will build filling station, also J. C. Wines. Richard Creek is completing station.

METAL HOSE & TUBING CO.
INCORPORATED
236 Tillary Street
BROOKLYN, N.Y.

MEMPHIS: 245 Monroe Ave.
JACKSONVILLE:
Dixie Culvert & Co.
ATLANTA: P. O. Box 1343
RICHMOND: P. O. Box 514
BROOKLYN: 236 Tillary St.
BOSTON: 142 Berkeley St.
PITTSBURGH: 341 Second Avenue
CLEVELAND:
1302 Ontario Street, North
CINCINNATI:
450 East Overland Street
DETROIT:
5459 Grand River Avenue
ST. LOUIS: 1621 Pine Street
KANSAS CITY:
13th Street and Eastern Ave.
CHICAGO:
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BUYERS of Tank Car Hose should remember that Triplexd not only outlives other makes, but will be repaired by us Free of Charge as long as repair is practicable. Many companies that have standardized on Triplexd for Tank Car and Tank Wagon use are now returning hose that was formerly junked and, at no cost whatever except carrying charges to and from Brooklyn, St. Louis, Los Angeles, or San Francisco, the hose is put back into service again.

METAL HOSE & TUBING CO.
INCORPORATED
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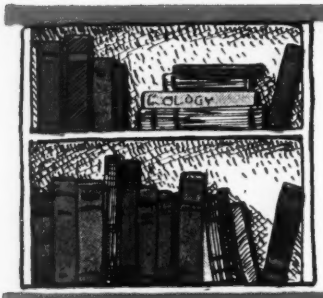
1401 South Flores Street
HOUSTON:
700 N. San Jacinto Street
EL PASO: 1020 East Pearl Street
NEW ORLEANS:
205 South Peters Street
MINNEAPOLIS:
900 Sixth Ave., S. E.
DENVER: 4800 York Street
SAN FRANCISCO:
873 Mills Building
LOS ANGELES:
1625 South Hill Street
SEATTLE: 67 Columbia St.
OMAHA: 13th and Willis Sts.
TORONTO, CAN.: Dunlop Tire & Rubber Goods Co., Ltd.
LONDON, ENG., J. Bazley-White, 3 Love Lane, Eastcheap, E. C. 3

TRIPLEXD
TANK CAR HOSE



Oil Man's Bookshelf

IF you want to find out just where you stand on the ladder of success, take an inventory of the number of new practical ideas you have contributed to your work!

That's really the measure of our advancement in any position—employer and employee alike.

Systematic, constructive reading gives you new ideas and insures steady advancement in your work.

The OIL MAN'S BOOKSHELF will help you select books you can read with the greatest profit—whether you are in the refining, producing, natural gasoline or marketing divisions of the oil industry.

AMERICAN FUELS

by

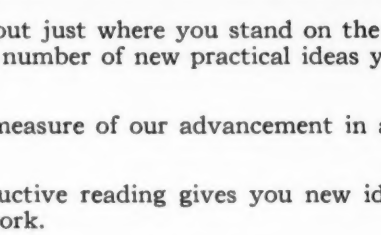
Bacon and Hamor

"American Fuels" comes in two volumes, a total of 1245 pages and 382 illustrations.

The work aims to assist the manufacturer, engineer and chemist in deciding upon the most suitable fuel to use to get the highest efficiency in plant operation. It gives details of equipment and definite advice and information not obtainable in book form before.

Some of the main topics covered are: Availability, Chemistry, Properties, Production of fuels—Combustion engineering—Coking, Water gas, Producer gas—Fuel oil—Powdered coal—Analysis, testing—Economic use of fuels—Advantages of specific fuels—Relative costs of fuels—Fuel conservation.

Two volumes—1245 pages—$12.



If you are interested in the great problem of supplying the world with fuel—get a copy of SHALE OIL.

It is written by men who have devoted years to the investigation of oil shale resources and their uses. R. H. McKee, professor of chemical engineering, Columbia Univ., is chief editor, and other oil shale specialists have contributed chapters as follows:

Origin of Oil Shales—Geology and distribution—Kerogen, the oil yielding material—Fundamental factors in analyzing and evaluating—Refining of shale oils—Nitrogen constituents—Basic factors of industry—Distillation plants—Patents. 325 pages—profusely illustrated, $6.00.

Power Plant LUBRICATION

"Power Plant Lubrication" is a new book just out. The author, Wm. F. Osborne, has for several years been working out methods of improving lubricating conditions in a great variety of machines.

In his book Mr. Osborne gives the solution to many lubricating problems. Anyone interested in the proper application of lubricants to machinery found in power plants will find this book very valuable.

Here is the table of contents:

General types of lubricants; Mineral lubricating oils; Physical and chemical properties of lubricating oils and grease; Fundamental principles of lubrication; Methods of applying oils to bearings; Continuous circulatory oiling systems; Testing bearing oils; Steam turbine and reduction gear lubrication; Lubricating steam cylinders; Testing steam cylinder oils; Steam engine, air compressor, refrigerating machine lubrication; Internal combustion engines; Buying lubricants; Standard methods of testing lubricants.

To solve your machinery lubricating problems, get a copy of "Power Plant Lubrication" just out.

275 pages—Illustrated—Price $3.

— — — — — — — — — — — — — — — — — — CUT AND MAIL — — — — — — — — — — — — — — — — — —

National Petroleum News,
803 Caxton Bldg., Cleveland, Ohio.

I want the books checked below. Enclosed is check or money order for $_____.

☐ *American Fuels* by Bacon and Hamor. $12

☐ *Shale Oil* by R. H. McKee. $6

☐ *Power Plant Lubrication* by W. F. Osborne. $3

NAME_____

Address_____

_____

_____

ON THE LAZY BENCH

National Petroleum News

Natural History Lesson

Wiley Moore of the Wofford Oil Company at Atlanta, Georgia, and "Sombrero" Campbell of the Deepwater Oil Refineries, happened to bump into each other the other day at Savannah and decided to go fishing for sea bass—or at least that's the way the story goes as told by Campbell. They didn't have much success for a little while but finally Wiley got a bite. He yanked and pulled and thought for a few minutes that he was going to break his line, but he finally landed a big five-gallon jug. He found that his line was down in the jug and kept flopping around, so looking into the opening he discovered that something was inside. "Sombrero" immediately broke the jug; and, lo and behold Wiley had hooked a five-pound bass which had found its way into the jug when a small fish and had grown to full size.

—R. B. Francis—Pure Oil News

* * *

Bad Case of "Rumatisem"

W. J. Talley, Philadelphia, sends in copy of the following letter offering a service station site in that city:

"Gents i have the best site in North Phila far an oil gas and atoemibel laindry drive in out shoild you hapean applicant far same see me site at five points where thoisend of aitos pass daily can be seen anytime as i am laid up with rumatisem 36 feet front 101 deep."

—Pure Oil News

* * *

Quite Excusable

Nice Old Lady: "It's a fine day, miss."

Youth: "It's a fine day, but I am not a miss, I am a mister."

Old Lady: "Oh, I beg pardon. You looked so much like a boy that I took you for a girl."

—Pure Oil News

* * *

Mr. MacDonald (arranging with clergyman for his second marriage)—"And I should like the ceremony in my yard this time, sir."

Clergyman—"Good gracious, why?"

Mr. MacDonald—"Then the fowls can pick up the rice—we wasted a deal last time!"

Union Oil Bulletin

* * *

Soph: "Between you and me, what do you think of Jack's girl?"

Fresh: "Between you and me, not so much; but alone—oh, boy!"

—Standard Gasoline Booster.

Water to Gas

Suddenly the motor gave some convulsive sobs and the car stopped. The young man, visibly embarrassed, made an earnest effort to start the engine, but failed. He was serious as he turned to the girl and said:

"This is most unfortunate. The gasoline tank seems to be full of water and we can't move a foot."

The girl was less perturbed. She said:

"Come on inside and stop looking worried. This has happened to me before. All we have to do is to sit in the back seat for about a half an hour and the water turns right back into gasoline."

—Pure Oil News

* * *

Dinner Was Over

The scene is the dining room of a little Arkansas hotel. The actors are a fussy Chicago salesman and a darky waiter. After ushering the guest to a seat, the waiter inquired:

"Will you all have pig tails and sauer kraut?"

"No, I never eat 'em," the guest replied.

"In that case," said the waiter, "dinner is over."

—Pure Oil News

* * *

What the Signal Means

An arm protruding from the car ahead means that the driver is:

1. Knocking ashes off a cigaret.
2. Going to turn to the left.
3. Telling a small boy to shut up, he won't buy any red pop.
4. Going to turn to the right.
5. Pointing out a scenic spot.
6. Going to back up.
7. Feeling for rain.
8. Telling his wife, hell yes, he's sure the kitchen door is locked.
9. Saluting a passing motorist or going to stop.

—Pure Oil News

* * *

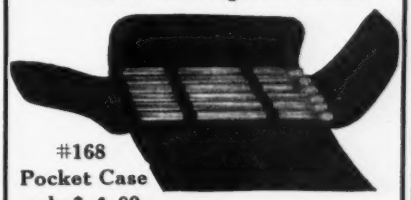
Courtesy We Meet

A tool dresser applying for a job with one of our major oil companies asked the doorman the location of the toolpusher's office.

"Well," replied the doorman, "just go along that hall to the door marked 'No Admittance.' Go through the door and up the stairs until you come to the corridor with the sign, 'Keep out,' follow the corridor until you come to a sign, 'Silence' and then holler for him. He's up around there somewhere."

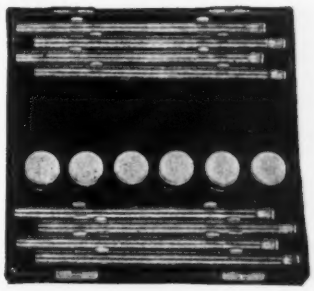
—Bridgeport Driller.

Pocket Sample Cases



#168
Pocket Case
only $4.00

Sturdily constructed from black cobra grain cowhide. Lined with red plush. Contains six bottles. 9"x1¼".



175—This case contains eight 9-inch bottles and six grease jars. Made from black cobra grain cowhide, lined with red plush. Has two serviceable nickel slide catches. Price including metal capped corks, only ---------- $7.00

Less 10% for Cash
Other styles in our FREE Catalog

L-U-C-E

Builders of Sales Luggage
614 Delaware Kansas City, Mo.

Transmission

STASO

Lubricant

This SIGN

is for the dealer who builds his business on the solid foundation of Good Will

WHEN a Dealer displays this sign, his business grows! Why?—because back of this sign is a successful method for giving motorists *correct lubrication!*

When a man drives his car in for oil, the Authorized Opaline Dealer looks at the speedometer and finds out the car's mileage—then he looks at the Sinclair Recommendation Index and finds out which grade of Opaline Motor Oil the car needs. He gives the motorist exactly the right grade to fit the degree of wear in the engine as indicated by the mileage.

May we tell you about this successful method of selling *correct lubrication* with the full line of Opaline Motor Oils?

SINCLAIR REFINING COMPANY, INC.

Also Makers of Sinclair Gasoline and H-C Gasoline

45 NASSAU STREET, NEW YORK

Atlanta Boston Chicago Houston Kansas City

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Refinery - Tank Wagon Markets

National Petroleum News

Steady Movement of Chief Products Cheers Mid-Continent Refiners

Staff Special

TULSA, June 11.

STEADY movement of gasoline in sufficient volume to keep any appreciable amount of distress goods off the market, with fairer and warmer weather, furnished the foundation for considerable optimism in the Mid-Continent this week.

This optimism was not confined alone to refiners. Several large buyers expressed belief that with the season of maximum consumption at hand chances are 10 to 1 that gasoline prices will go up rather than down. With but few exceptions resale agents have been reluctant to gamble on the immediate future of the gasoline market, unless they had themselves well protected at their sources of supply. Occasional small lots of 58-60 U. S. Motor gasoline offered to resale agents at 6.50 cents, were quickly snapped up.

One outstanding exception to the foregoing was the reported short sale of approximately 300 cars of 58-60 U. S. Motor gasoline at 6.50 to 6.625 cents by a north Texas refiner.

A survey shows that orders placed this week, did not involve as many 5 and 10-car lots of gasoline as last week's orders. Neither were the single car sales so numerous. Movement on contracts was reported to be exceptionally good, and jobbers were said to be ordering shipments regularly.

Taking the week as a whole 6.50 cents 58-60 U. S. Motor gasoline was not a factor in determining going prices to the jobbing trade. The bulk of motor sold at 6.625 to 6.875 cents, with enough sales at 7 cents to make 7 cents partly representative of the market. Sales to resale agents at 6.625 cents were considerably fewer this week, as compared with last week.

EXPORTERS were not active. One buyer continued to take options with several north Texas refiners on large quantities of 64-66, 375 end point gasoline but no purchases developed. The sale of approximately 320,000 gallons of this 64-66, 375 end point gasoline at 6.875 cents to an exporter was reported by one north Texas refiner.

The domestic market for high gravity gasolines has been somewhat of an enigma to many of the trade in Tulsa lately. Prices quoted for high tests continued wide in range this week. The trade agreed upon one fact: that there was little demand from the jobbing trade for the premium grades of gasoline, which is natural at this season. A few sales of 64-66, 375 end point gasoline were reported at 7.25 cents a gallon, and some sellers reported getting 7.75 cents for this grade. Likewise sales of 60-62, 400 end point gasoline were reported at as low as 6.875 cents a gallon and at as high as 7.625 cents.

PRICES of all grades of natural gasoline were off 0.25 to 0.375 cent. Orders received this week, most sellers reported, were for one and two-car lots only. Grade AA which sold on Monday at 5.50 cents went at 5.125 to 5.25 cents today. Monday Grade BB was generally held at 5.25 to 5.375 cents whereas today it sold at 5 to 5.125 cents. Manufacturers today were asking 5 cents for grade C against 5.25 cents Monday.

Kerosene prices slipped in all parts of the Mid-Continent except Louisiana and Arkansas. Refiners in Louisiana and Arkansas explained they must have come in on the tail end of the recent flurry of kerosene buying. They reported their tractor fuel stocks were in good shape and said they were unwilling to change their prices to meet the competition in Oklahoma and north Texas.

Kerosene prices were off 0.125 to 0.25 cent. Today 41-43 water white was selling at 4.125 to 4.375 cents. Buyers reported they had purchased considerable quantities at 4 cents a gallon for shipment over the remainder of the month.

Other light grades of burning oil were in little demand. The 38-40 gravity straw color distillate was offered late this week at as low as 3 cents.

The current gas oil market has been quiet but there has been considerable speculation among buyers about the trend of prices. It was generally felt that unless refiners could see their way clear shortly to begin cracking that a large volume of this oil would be offered for sale. Little or no gas oil has been offered on the spot market at less than 2.625 cents. Refiners have largely gotten 2.75 cents for small lots and 2.625 cents for 50 and 100-car lots. Whenever a bargain of 50 cars or so appeared on the market, it was quickly taken by resale buyers. In most instances the oil was for deferred shipment. Several large buyers have indicated they were ready to take on sizable quantities of gas oil both for prompt and deferred shipment at 2.50 cents.

Heavy fuel oils continued in good demand. There were reported several 100-car orders for 14-16 gravity oil in the market this week and as near as could be ascertained the buyers were unsuccessful in getting their requirements. Fuel oil of this gravity was held at $0.85 a barrel. Late this week, one refiner who makes considerable 14-16 fuel oil, advanced his price for all new business to $0.90. High gravity fuel oil was reported available at the same prices as low gravity oil.

DEMAND for fuel oil in north Texas was reported as fairly good. One refiner reported the sale of 10,000 barrels of 24-26 at $0.875 a barrel. Toward the end of the week prices were off approximately 2.50 cents a barrel. Small lots of 24-26 were reported sold at from $0.925 to $0.875.

Cylinder stocks and neutral oil prices were steady. Some refiners reported a steady demand for neutral oils while others stated there had been a slight lull in buying.

More inquiries were in the market for wax but sellers generally reported they were holding their goods for higher prices. Sales of 124-126 white crude scale were found this week at 2.25 to 2.375 cents with some sellers asking 2.50 cents a pound.

JANESVILLE, WISC. — Peerless Oil Co. has added storage and is now distributor for Delcol Benzol at Janesville and Beloit.

NATURAL GASOLINE

MODERNIZED "CASING-HEAD"

Don't confuse modern NATURAL GASOLINE with the old time "casing-head". There's just as much difference as between 1910 motors and the high speed, high compression, eight-in-line motors of today.

Modern practices are responsible for the character of present day NATURAL GASOLINE—a product that is as easily and as safely handled as ordinary gasoline. The "wild" product of a decade ago has been tamed, made better and more efficient, and vapor losses both in shipping and blending reduced to the minimum.

Research and experiment, backed by modern practice have changed the entire character of NATURAL GASOLINE until today it is recognized by refiners and distributors everywhere as a necessary component of modern day motor fuel.

A vast amount of information has been collected and classified by our bureau of research. These bulletins will gladly be sent on application to the Research Department, Association of Natural Gasoline Manufacturers, Cosden Building, Tulsa, Oklahoma.

RESEARCH DEPARTMENT OF THE

ASSOCIATION OF NATURAL GASOLINE MANUFACTURERS

Refinery Markets on Light Oils and Lubricants

Prices given below are in cents per gallon, F. O. B. refinery, except where $ sign is shown

(These Refinery Prices compiled in the OIL PRICE HANDBOOK for a whole year)

GASOLINE AND NAPTHA

PENNSYLVANIA	Prices June 13	Prices June 6	Prices May 31
52-54 Naphtha	8.75 – 9.50	8.75 – 9.50	8.50 – 9.00
54-56 Naphtha	8.75 – 9.50	8.75 – 9.50	8.50 – 9.50
58-60 Gasoline	9.00 – 9.25	8.75 – 9.25	8.75 – 9.00
60-62 Str.-run gasoline	9.25 –10.50	9.50 –10.50	9.25 –10.00
64-66 Str.-run gasoline	10.00 –10.50	10.00	10.00 –10.50
68-70 Str-run gas. 350-360 e.p.	10.50 –11.50	10.75 –12.00	10.50 –11.00
68-70 Str-run gas. 305-320 e.p.	15.00 –18.00	17.00 –18.00	16.00 –18.00
OKLAHOMA			
48-50 450 e.p. naphtha	6.50	6.50	6.25 – 6.50
50-52 450 e.p. naphtha	6.50	6.50	6.25 – 6.50
56-58 450 e.p. gasoline	†6.50	†– 6.50	†6.25 – 6.50
56-58 U. S. Motor, 437 e.p.	6.50 – 6.625	6.50	†6.25– 6.50
58-60 450 e.p. gasoline	††6.50	††– 6.50	††6.25– 6.50
58-60 U. S. Motor, 437 e.p.	6.625– 7.00	6.50 – 7.00	6.625– 6.875
60-62 437 e.p. gasoline	6.625– 7.125	6.625– 7.125	6.625– 6.875
60-62 400 e.p. gasoline	†6.875– 7.625	†7.00– 7.25	6.875– 7.00
64-66 350 e.p. gasoline	†7.00 – 7.25	†7.00– 7.25	*7.00 – 7.25
64-66 375 e.p. gasoline	†7.25 – 7.75	†7.25– 7.50	7.00 – 7.25
68-70 350-360 e.p. gasoline	†7.50 – 8.00	7.50 – 7.75	7.50 – 7.75

†Prices nominal. ††Only one refiner quoting. *Quotation only.
**Represents quotations and sales.

KANSAS (F. O. B. refinery Kansas destination)			
58-60 U. S. Motor 437 e.p.	7.00 – 7.25	7.00 – 7.25	7.00 – 7.125
60-62 400 e.p. gasoline	7.25 – 7.50	7.25 – 7.50	7.25 – 7.50
64-66 375 e.p. gasoline	7.50 – 7.75	7.50 – 7.75	7.50 – 7.75
NORTH TEXAS			
48-52 450 e.p. naphtha	†6.25	†6.25	†6.00– 6.25
56-58 450 e.p. gasoline	†6.25	†6.25	†6.00– 6.25
58-60 450 e.p. gasoline	6.25 – 6.375	6.25	6.25
56-58 U. S. Motor 437 e.p.	††6.25	††6.25	††– 6.25
58-60 U. S. Motor 437 e.p.	6.50	6.50	6.375– 6.50
64-66 350 e.p. gasoline	6.75 – 6.875	6.875	6.75
64-66 375 e.p. gasoline	7.00	7.00	6.875– 7.00
68-70 350-360 e.p. gasoline	†7.25 – 7.50	*7.25 – 7.50	*7.25 – 7.50

†Prices nominal. ††Only one refiner quoting. *Quotations only.

NORTH LOUISIANA (For Louisiana and differential territory destination)			
56-58 U. S. Motor gasoline	7.00	6.75 – 6.875	6.75 – 7.00
ARKANSAS (For Arkansas intrastate shipment only)			
56-58 450 e.p. gasoline	6.75 – 7.00	– 6.75	6.50 – 6.75
58-60 450 e.p. gasoline	6.75 – 7.00	– 6.75	6.50 – 6.75
58-60 U. S. Motor 437 e.p.	7.125– 7.50	7.00 – 7.50	7.00 – 7.25
ARKANSAS (F. O. B. Arkansas refineries for interstate shipment)			
58-60 U. S. Motor 437 e.p.	6.75 – 7.00	6.75 – 6.875	
CALIFORNIA			
*54-58 U.S. Motor 437 e.p.	8.00 – 9.00	7.50 – 8.50	7.00 – 8.00
*58-61 U.S. Motor 437 e.p.	8.50 – 9.50	8.50 – 9.50	8.00 – 9.00
*42-45 Eng. dis. 445-480 e.p.	6.00 – 7.00	6.00 – 7.00	7.00

*2c tax to be added if used in state.

NEW ENGLAND			
58-60 U. S. Motor gas	–10.00	–10.08	10.08

NATURAL GASOLINE

(Note: End point of all grades, not over 375° F.)

OKLAHOMA			
Grade AA, 80-87.9, 90% Recovery	5.00– 5.25	5.50	5.875– 6.00
Grade A, 72-79.9, 90% Recovery	5.00– 5.25	5.50	5.875– 6.00
Grade BB, 84-92, 85% Recovery	5.00	5.25 – 5.375	5.375– 5.50
Grade B, 76-83.9, 85% Recovery	5.00	5.25 – 5.375	5.375– 5.50
Grade C, 80-90, 78% Recovery	† 5.00	†5.125– 5.25	*5.25 – 5.50

†Prices nominal. *Quotations only.

NORTH TEXAS (F. O. B. Breckenridge)			
Grade AA, 80-87.9, 90% Recovery	5.00– 5.25	5.50	5.875– 6.00
Grade A, 72-79.9, 90% Recovery	5.00– 5.25	5.50	5.875– 6.00
Grade BB, 84-92, 85% Recovery	5.00	5.25 – 5.375	†5.375– 5.50
Grade B, 76-83.9, 85% Recovery	5.00	5.25 – 5.375	†5.375– 5.50
Grade C, 80-90, 78% Recovery	†5.00	†5.125– 5.25	5.25 – 5.50

†Prices nominal.

NORTH LOUISIANA (F. O. B. Monroe District)			
Grade AA	5.625– 5.75	* 5.75	† 6.125
Grade BB	†5.50 – 5.625	† 5.50	† 5.50
Grade C	†5.50	† 5.25	† 5.50

†Prices nominal.

CALIFORNIA			
75-85, 375-390 e.p. blend	6.00 – 8.00	6.00 – 8.00	6.00 – 8.00

MOTOR FUEL BLENDS

PENNSYLVANIA			
68-70 Blend 437 e.p.	9.00 – 9.50	9.00 – 9.50	9.00 – 9.50
64-66 Blend 437 e.p.	8.75 – 9.50	8.75 – 9.50	8.50 – 9.50
60-62 Blend 437 e.p.	8.75 – 9.50	8.75 – 9.50	8.50 – 9.50
OKLAHOMA			
64-66 Blend 437 e.p.	6.25	6.25	6.25

BURNING OILS

PENNSYLVANIA			
45 w.w. kerosene	6.50 – 6.75	6.50 – 6.75	6.375– 6.875
46 w.w. kerosene	6.75 – 7.00	6.75 – 7.00	6.875– 7.375
47 w.w. kerosene	7.25 – 7.50	7.25 – 7.50	7.25 – 7.50
OKLAHOMA			
41-43 w.w. kerosene	4.125–4.375	4.375– 4.50	4.375– 4.50
42-44 w.w. kerosene	4.50 – 4.75	4.625– 4.75	4.75
KANSAS (F. O. B. refinery Kansas destination)			
41-43 w.w. kerosene	5.25	5.25 – 5.50	5.50
42-44 w.w. kerosene	5.50	5.50 – 5.75	5.50 – 5.75

NORTH TEXAS	Prices June 13	Prices June 6	Price May 31
40-42 w.w. kerosene	3.875 –	4.00	4.00 – 4.125
41-43 w.w. kerosene	– 4.00	4.25	4.25 – 4.375

†Prices nominal.

NORTH LOUISIANA (For Louisiana and differential territory destination)			
41-43 w.w. kerosene	4.50 – 4.75	4.75	4.50 – 4.75
ARKANSAS (For intrastate shipment only)			
41-43 w.w. kerosene	4.625– 4.75	4.75	4.75
42-44 w.w. kerosene	4.875– 5.00	5.00	5.00
ARKANSAS (F. O. B. Arkansas refineries for interstate shipment)			
41-43 w.w. kerosene	4.50 – 4.625	4.50 – 4.75	
42-44 w.w. kerosene	4.625– 4.75	4.75 – 5.00	
CALIFORNIA			
38-40 w.w. kerosene	5.50 – 6.00	5.50 – 6.00	5.50 – 6.00
NEW ENGLAND			
40-43 w.w. kerosene	*– 7.50	*– 7.50	*– 7.50

*Only one refiner quoting.

NEUTRAL OIL

PENNSYLVANIA			
Vis.	**(Viscosity at 70°F.)**		
200 No. 3 Assoc. Filt.	34.50 –35.00	34.00 –34.50	34.00 –35.00
180 No. 3 Assoc. Filt.	31.00 –32.00	30.50 –32.00	30.50 –32.00
150 No. 3 Assoc. Filt.	28.00 –28.50	28.00 –28.50	28.00 –29.00
	(Non Viscous)		
34 Grav. 330-340 Flash	7.00 – 7.75	7.00 – 7.75	7.00 – 7.75
36 Min. Neut. 300-305 Flash	6.50 – 7.25	6.50 – 7.50	6.50 – 7.50
***OKLAHOMA**			
Vis. Color	**(Viscosity at 100°F.)**		
100—No. 2	6.00 – 7.50	6.00 – 7.50	6.00 – 7.50
150—No. 3	8.50 – 8.75	8.50 – 8.75	8.50 – 8.75
150—No. 4	8.25 – 8.50	8.25 – 8.50	8.25 – 8.50
180—No. 3	9.50 –10.25	9.50 –10.25	9.50 –10.25
180—No. 4	– 9.75	– 9.75	9.75
180—No. 5	9.50 – 9.75	9.50 – 9.75	9.50 – 9.75
200—No. 3	10.00 –11.00	10.00 –11.00	10.00 –11.00
200—No. 4	10.50 –10.75	10.50 –10.75	10.50 –10.75
200—No. 5	9.00 –10.50	9.00 –10.50	9.00 –10.50
220—No. 3	12.50 –13.50	12.50 –13.50	12.50 –13.50
220—No. 4	12.25 –12.50	12.25 –12.50	12.25 –12.50
220—No. 5	11.50 –12.00	11.50 –12.00	11.50 –12.00
240—No. 3	14.00 –15.00	14.00 –15.00	14.00 –15.00
240—No. 4	–13.50	–13.50	13.50
240—No. 5	12.00 –13.00	12.00 –13.00	12.00 –13.00
280—No. 3	16.00 –17.00	16.00 –17.00	16.00 –17.00
280—No. 4	–15.25	–15.25	15.25
280—No. 5	14.00 –15.00	14.00 –15.00	14.00 –15.00
300—No. 5-6	–17.00	–17.00	17.00

*Represent quotations and sales.

GULF COASTAL			
Vis. Color	**(Viscosity at 100° F., pour test 0)**		
100—No. 2 Unfilt. Pale	7.00 – 7.50	7.00 – 8.00	7.00 – 8.00
200—No. 3 Unfilt. Pale	10.50 –11.00	10.50 –11.00	10.50 –11.50
300—No. 3 Unfilt. Pale	11.50 –12.00	11.50 –12.00	11.50 –12.50
500—No. 3½ Unfilt. Pale	13.50 –14.00	13.50 –14.00	13.50 –14.50
750—No. 4 Unfilt. Pale	16.00 –16.50	16.00 –16.50	16.00 –16.50
200—No. 5½ Red Oil	8.50 – 9.00	8.50 – 9.50	8.50 – 9.50
300—No. 5½ Red Oil	10.00 –10.50	10.00 –11.00	10.00 –11.00
500—No. 6 Red Oil	11.50 –12.00	11.50 –12.50	11.50 –12.50
750—No. 6 Red Oil	14.50 –15.00	14.50 –15.50	14.50 –15.50
CALIFORNIA			
Vis. Color	**(Viscosity at 100°F.)**		
100—No. 2	9.00 – 9.50	9.00 – 9.50	9.00 – 9.50
100—No. 3	7.50 – 8.00	7.50 – 8.00	7.50 – 8.00
200—No. 3	9.50 –10.00	9.50 –10.00	9.50 –10.00
300—No. 3	10.50 –11.00	10.50 –11.00	10.50 –11.00
450—No. 3-3½	13.00 –13.50	13.00 –13.50	13.00 –13.50
550—No. 3-3½	14.50 –15.00	14.50 –15.00	14.50 –15.00
600—No. 3-3½	15.00 –15.50	15.00 –15.50	15.00 –15.50
100—No. 5	6.50	6.50	6.50
200—No. 5	8.00 – 8.50	8.00 – 8.50	8.00 – 8.50
300—No. 5	9.00 – 9.50	9.00 – 9.50	9.00 – 9.50
400—No. 5	11.00 –11.50	11.00 –11.50	11.00 –11.50
500—No. 5	11.00 –11.50	11.00 –11.50	11.00 –11.50
600—No. 5	12.00 –12.50	12.00 –12.50	12.00 –12.50
700—No. 7	14.00 –14.50	14.00 –14.50	14.00 –14.50

CYLINDER STOCKS

*OKLAHOMA			
150-200 Vis. at 210° Brt. St.	31.00 –32.00	31.00 –32.00	31.00 –32.00
150-160 Vis. at 210° Brt. St.	26.00 –28.00	26.00 –28.00	26.00 –28.00
600 E St. 140-150 Vis.-210°	17.00 –18.00	17.00 –18.00	17.00 –18.00
600 St. Ref. Olive Green	9.00 –10.00	9.00 –10.00	9.00 –10.00
600 St. Ref. Dark Green	7.00 – 8.00	7.00 – 8.00	7.00 – 8.00
Black Oil	5.00	5.00	5.00

*Represent quotations and sales.

PENNSYLVANIA (1-inch Immersion Test)			
600 Steam Refined	9.00 – 9.50	9.00 –10.25	9.00 – 9.50
650 Steam Refined	11.50 –12.50	11.00 –12.50	11.00 –13.00
600 Flash	17.00 –18.00	17.00 –18.00	15.00 –18.00
625 Flash	26.00 –29.00	27.00 –29.00	26.00 –29.00
600 Warren E	19.00 –20.00	18.00 –20.00	18.50 –20.00
600 Oil City E	17.50 –18.25	17.00 –18.00	17.25 –18.00
600 D Filtered	25.50 –26.00	25.00 –26.00	25.50 –26.00
Cold Test Stocks (brt. filt.)	33.50 –34.00	33.00 –34.00	33.00 –34.00
Cold Test Stock (dark filt.)	31.50 –32.00	31.00 –32.00	31.50 –32.00

(Note—Prices of total immersion test goods average 1 to 3 cents per gallon higher)

LONG RESIDUUM STOCKS

PENNSYLVANIA			
60-65 vis. @ 210, 440-450 flash No. 5½ color	33.50	33.50	33.00 –34.00
70-75 vis. @ 210, 450-455 flash No. 6 color	34.00 –34.50	34.00 –34.50	34.00 –35.00
80-85 vis. @ 210, 440-450 flash No. 7 color	36.00	36.00	34.50 –36.00
80-85 vis. @ 210, 450-460 flash No. 7-8 color	36.50	36.50	35.00 –37.00
80-85 vis. @ 210, 460-465 flash No. 7 color	37.00	37.00	36.00 –38.00
95-100 vis. @ 210, 490-495 flash No. 8 color	38.50	38.50	39.00

The Woods Model 51W4 (2½ Ton)

The above reproduction shows one of the Woods Trucks used by the Pure Oil Co. The strain that Trucks operated by Oil Companies must stand in their Heavy Duty delivery work necessitates a truck with stamina, stability and long life. A Buda engine (45HP)—Counterbalanced crankshaft—TWO RANGE—7 SPEED TRANSMISSION WITH OVERDRIVE GEAR—Ross Steering Gear, and Timken bearings throughout.

Can you ask for anything better?

PATRIOT MANUFACTURING COMPANY

***Factory*—Havelock, Nebraska** **Lincoln, Nebraska**

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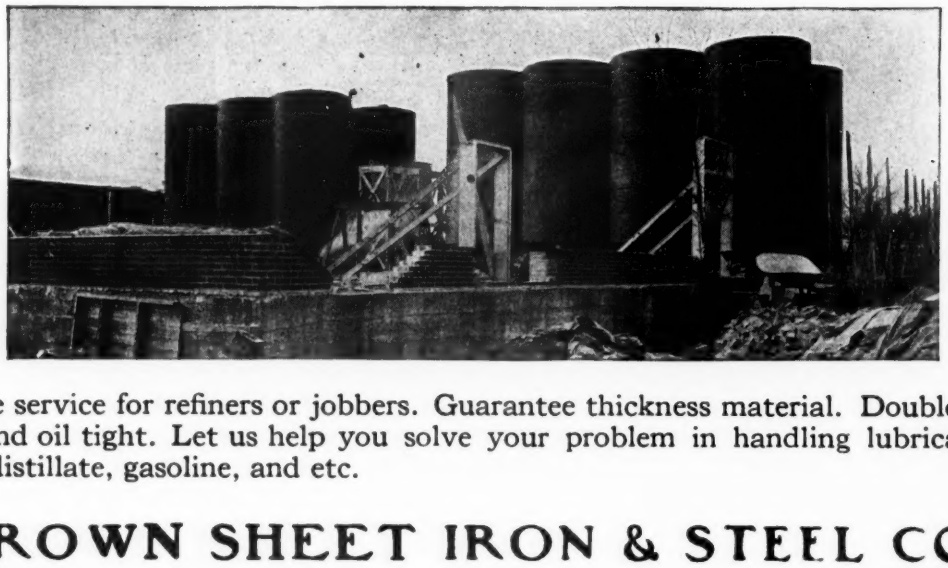
Heated tanks, pumps, manifolds, compounding kettles



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Check Items on which you want prices.

Complete Bulk Station ..... Number of Tanks ..... Size .....

Filling Station Tanks ..... Size ..... Pumps .....

Truck Tanks ..... Size ..... Compts .....

Other Equipment .....

Name ..... Address .....

Refinery Markets on Wax and Heavy Oil Products

Prices given below are in cents per gallon, F. O. B. refinery, except where $ sign is shown

(For quick reference to Refinery prices, get the OIL PRICE HANDBOOK, published annually)

WAX

*PENNSYLVANIA	Prices June 13	Prices June 6	Prices May 31
122-124 white crude scale.	3.125 – 3.25	3.00 – 3.25	2.70 – 2.875
124-126 white crude scale.	3.125 – 3.25	3.00 – 3.25	2.70 – 2.875
*Per Pound, New York			
OKLAHOMA			
*124-126 white crude scale, per pound	2.25 – 2.50	2.25 – 2.50	2.50 – 2.625
*Represents quotations and sales.			
CALIFORNIA			
White crude scale, per pound	6.00 – 7.00	6.00 – 7.00	6.00 – 7.00

FUEL OIL

PENNSYLVANIA			
36-40 fuel oil	4.75 – 5.00	4.50 – 5.00	4.75 – 5.125
30-34 fuel oil	4.75 – 5.00	4.50 – 5.00	4.625– 5.00
28-32 fuel oil	4.75 – 5.00	4.50 – 5.00	4.625– 5.00
OKLAHOMA			
38-40 straw distillate	3.125– 3.25	– 3.25	– 3.25
36-38 straw distillate	– 3.00	– 3.00	– 3.00
32-36 gas oil, cracked	– 2.625	– 2.625	– 2.75
32-36 gas oil, str. reduced	2.625– 2.75	– 2.75	2.75 – 2.875
28-30 fuel oil (in bbls.)	–$0.95	$0.975–$1.025	$1.00 –$1.025
26-28 fuel oil (in bbls.)	–$0.95	–$0.95	–$0.95
24-26 fuel oil (in bbls.)	–†$0.90	†$0.925–$0.95	†$0.925–$0.95
22-26 fuel oil (in bbls.)	–†$0.90	†$0.925–$0.95	†$0.925–$0.95
18-22 fuel oil (in bbls.)	–$0.90	$0.90 –$0.925	†$0.90 –$0.925
16-18 fuel oil (in bbls.)	†–$0.85	†$0.85 –$0.875	†–$0.85
14-16 fuel oil (in bbls.)	†–$0.85	–$0.85	$0.85
†Prices nominal.			
KANSAS (F. O. B. refinery Kansas destination.)			
38-40 straw distillate	– 3.75	– 3.75	– 3.75
36-38 straw distillate	– 3.25	– 3.25	– 3.25
32-36 gas oil	2.75 – 3.00	2.75 – 3.00	2.75 – 3.00
24-26 fuel oil	*$1.05 –$1.10	*–$1.10	*–$1.10
18-22 fuel oil	*$0.95 –$1.00	*–$1.00	*–$1.00
*Quotations only.			
NORTH TEXAS			
38-40 straw distillate	– 3.00	3.00 – 3.125	3.00 – 3.125
32-36 gas oil, cracked	2.50 – 2.625	2.50 – 2.625	– 2.625
32-36 gas oil, uncracked	– 2.625	– 2.625	2.625– 2.75
24-26 fuel oil (in bbls.)	$0.85–$0.875	$0.85 –$0.95	$0.90 –$0.95

GULF COASTAL	Prices June 13	Prices June 6	Price May 3
Fuel (in bbls.)	$1.60 –$1.65	$1.60 –$1.65	$1.60 –$1.65
Gas oil	4.50 – 4.75	4.50 – 4.75	4.50 – 4.75
NORTH LOUISIANA (For Louisiana and differential territory destination)			
32-36 gas oil, cracked	3.00 – 3.25	– 3.25	– 3.00
32-36 gas oil, uncracked	– 3.25	– 3.25	3.00 – 3.25
16-20 fuel oil (in bbls.)	–$1.15	–$1.15	–$1.15
ARKANSAS (For Arkansas intrastate shipment only)			
32-36 gas oil, straw	– 3.50	3.50 – 3.75	3.50 – 3.75
28-32 gas oil	3.25 – 3.375	3.25 – 3.50	3.25 – 3.50
Road oil	$1.25 –$1.30		
ARKANSAS (F. O. B. Arkansas refineries for interstate shipment)			
28-32 gas oil	3.00 – 3.125	– 3.00	
Smackover crude fuel	$1.10 –$1.15	$1.125–$1.15	
Road oil	$1.15 –$1.25		
CALIFORNIA (F. O. B. San Joaquin Valley. At San Francisco, 4c per bbl. more)			
14-18 fuel oil (in bbls.)	$0.65 –$0.85	$0.65 –$0.85	$0.75 –$0.90
14-18 Bunker oil (in bbls.)	$0.80 –$1.00	$0.80 –$1.00	$0.80 –$1.00
30-34 gas oil (in bbls.)	$1.00 –$1.05	$1.00 –$1.05	$1.00 –$1.05
27 Diesel oil (in bbls.)	$1.00 –$1.05	$1.00 –$1.05	$1.00 –$1.05
NEW ENGLAND			
30-32 gas oil	– 5.58	– 5.58	– 5.67
Fuel oil (Bunker C) in bbls.	–$1.73	–$1.73	–$1.82

PETROLATUMS

PENNSYLVANIA (In cents per pound in tank cars; in barrels, in car lots ¾c per pound more.)			
Snow White	7.25 – 7.50	7.25 – 7.50	7.25 – 7.50
Lily White	6.25	6.25	6.25
Cream White	5.25	5.25	5.25
Light Amber	2.625– 2.75	2.625– 2.75	2.625– 2.75
Amber	2.375– 2.50	2.375– 2.50	2.375– 2.50
Red	2.125	2.125	2.125
Green No. 5 color	1.50	1.50	1.50

*PETROLEUM COKE

(Per ton in car lots)

Lump	$5	$5	$5
Still run	$3	$3	$3
Breeze	$2	$2	$2

*Represents quotations and sales.

Gasoline Buying is Increased in New York Domestic Market

By Special Correspondent

NEW YORK, June 13

WEATHER was more favorable last week and a heavy increase in the jobbing demand for gasoline cleaned up most of the 8.75-cent gasoline. There was practically nothing obtainable in this section Saturday below 9 cents. Although considerable California gasoline is still coming into this market stocks are not so burdensome as they were a short time ago. The last tanker rate from the Pacific coast to New York was 84 cents a barrel, or 2 cents a gallon. With U. S. Motor selling at 6 cents in California the cost price to lay a cargo down here was 8 cents a gallon.

U. S. Motor was held at 10 cents a gallon in tank cars delivered to the nearby trade by New York and Philadelphia refiners. Upstate jobbers are doing more forward buying than a week ago. The steadier markets in the Mid-Continent and California have improved sentiment here considerably and active export demand has helped.

Gulf refiners reported more active domestic demand. Consumption is fully up to expectations and jobbers are buying ahead. Refiners were asking 7.50 cents a gallon for U. S. Motor gasoline in tank cars at the refineries. Tank wagon prices are reported to be steadier than a week ago.

Bulk kerosene was dull at New York. Demand was strictly hand-to-mouth and no forward buying developed. New York Harbor refiners were offering 41-43 water white at 6.75 cents a gallon at refineries. Water white 43-45 was quoted 0.25-cent a gallon above these prices.

Gulf refiners reported a light spasmodic demand for kerosene. Stocks are fairly large but prices held steady at 5.50 cents a gallon for 41-43 water white and 6.50 cents a gallon for 44 water white.

Sioux Falls, S. D.—A mid-summer convention is being planned by the South Dakota Independent Oil Men's Association for the latter part of July, according to J. H. Cumbow, secretary-treasurer of the Cumbow Lanning Oil Co. here. Date and place of the meeting has not yet been decided upon.

Shpiments from Los Angeles

LOS ANGELES, June ments of all petroleum prod Los Angeles harbor to points o Pacific Coast trade territory in week ended June 3 totaled 1,55[illegible]81 barrels, or a daily average movement of 221,654 barrels. Pacific foreign ports drew 311,014 barrels of fuel, 147,349 barrels of gasoline, and 47,741 barrels of diesel oil. Atlantic domestic drew 241,777 barrels of crude, 48,597 barrels of fuel, 254,315 barrels of gasoline, and 71,520 barrels of gas oil. The remaining went to Atlantic foreign points.

Pan American Petroleum Co. shipped to Japan 4498 barrels of lube oils, not included in the foregoing.

Oklahoma Jobbers Meet June 23

Oklahoma City, June 11.—On June 23 the Oklahoma Oil Jobbers Association, Inc., will hold its summer meeting at the Oklahoma Club here, according to A. J. McClelland, manager, secretary and treasurer.

The morning session will be devoted exclusively to Independent jobbers. Luncheon will be at 12:30 at the Club for associate and jobber members, and the afternoon session will be for both jobbers and associate members.

Chicago Resale Market is Quiet But Prices are Steady

Staff Special

CHICAGO, June 11

CHICAGO market for 58-60 U. S. Motor gasoline was more active near the end of this week than near the beginning. The activity of last week, following a three-day holiday, had subsided by the first of this week. Trading was mostly in small quantities with regular customers while some carload marketers obtained some new spot market customers.

A refiner sold 20 cars of 56-58 U. S. Motor gasoline into Minnesota this week at 6.75 cents. High test gasolines continued to be in little demand and a small volume of business was done.

Gasoline prices were steady over the week. The 58-60 U. S. Motor gasoline was 6.75 to 6.875 cents, some sellers asking 7 cents and reporting a few sales at this price. The 60-62, 437 e.p. gasoline was 6.75 cents to 7 cents; 60-62, 400 e.p. grade 7 to 7.125 cents; 64-66, 375 e.p. 7.25 to 7.50 cents, and 68-70, 350-360 e. p. gasoline was quoted at 7.50 to 7.75 cents.

Kerosene demand was light. The 41-43 w.w. grade was down fractionally to 4.25 to 4.375 cents, after selling at 4.375 to 4.50 cents until Wednesday.

There has been no extensive buying of heavy oils by distributors or industrial concerns this week. The trade reported a good volume of small orders and prices steady. A marketer Monday sold 50 cars of 32-36 dark gas oil at 2.75 cents for June shipment to an industrial concern.

Heavy oil prices were steady. The 38-40 straw distillate sold at 3.25 to 3.75 cents. The 32-36 dark gas oil at 2.75 to 2.875 cents, and 32-36 straw gas oil at 3 to 3.25 cents, the zero cold test oils commanding the higher prices. Fuel, 28-30, was $1.00 to $1.05; 24-26 $0.95; 22-26 $0.925 to $0.95, and 18-22 $0.90 to $0.925.

Interest in Smackover centers on buyer's requirements for next winter. Spot market quotation was unchanged at $1.125 to $1.15.

Fuel inquiries, for future delivery, were reported to be the average for this time of year. One industrial company was inquiring for 15 cars a month of 24-26 and another for 10 cars monthly of 20-24 fuel, both over a year. A third company is receiving bids until June 13 on 500,000 gallons of fuel oil for July delivery, and another inquiry is in the market for 250 cars of 18-20 fuel oil over six months. Bids were closed Friday by a railroad on 16 cars of 36-38 straw distillate.

A contract was signed recently by carload marketer to supply an Indiana industrial plant with 10,000,000 gallons of 18-20 fuel oil over a year with a minimum price of $0.90 and a maximum of $1.

Weather in Standard Oil Co. of Indiana territory was better this week, being fair and warmer. Frequent showers and thunderstorms are forecast for next week. Mostly seasonal normal temperatures are predicted with cool weather in the northern part early in the week.

Benzol Little More Active

NEW YORK, June 13.—Demand for motor benzol was a little more active last week although leading marketers were still quoting spot tankcars at the ovens 21 cents a gallon. Stocks of benzol are reported to be fairly large and accumulating. Motor fuel blenders have been inquiring actively but are keeping their purchases down. Purchases for export were small. Pure and ninety per cent benzol were offered more freely.

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OILGRAM
Petroleum Markets-Every Day

HOW SURE ARE YOU?

If you were to place an order *today* for gasoline, or kerosene, or fuel oil, or lubricating oil—

How sure would you be that you were buying *at the right time* and *at the actual market?*

Did you hear of a tankwagon cut today in another territory, which might indicate a cut coming in yours? Or, did crude change today? Or, did some one put in a big buying order for export which will stiffen the gasoline market ¼ cent or so tomorrow?

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Week's Price Changes Tank Wagon Markets

Gasoline Changes

Standard of Indiana—T.w. and s.s. prices gasoline reduced 1 cent, Minneapolis and St. Paul, to 14 cents and 16 cents respectively at both points, **June 5.** T.w. and s.s. prices gasoline reduced 2 cents, Kansas City, to 14.9 cents and 16.9 cents respectively, **June 9.** T.w. and s.s. prices gasoline reduced 2 cents, Mason City, to 14.5 cents and 16.5 cents respectively, **June 1.**

T.w. and s.s. prices gasoline reduced 2 cents, Duluth, to 15.5 cents and 17.5 cents respectively, **June 10,** and 2 cents, Superior, Wisc., to 15.4 cents and 17.4 cents respectively, **June 11.**

Continental Oil—T.w. and s.s. prices gasoline advanced 1 cent generally Colorado, with a few exceptions, except Denver s.s. price advanced 2 cents, and Cheyenne gasoline advanced 1 cent, **June 8.**

Standard of Louisiana—T.w. and s.s. prices gasoline advanced 1 cent, Arkansas, due to 1 cent increase in tax, bringing total state tax to 5 cents, **June 9.**

Magnolia Petroleum—T.w. and s.s. prices gasoline advanced 1 cent, Arkansas, due to 1 cent increase in tax, bringing total state tax to 5 cents, **June 9.**

T. w. and s. s. prices gasoline reduced 1 cent, Fort Worth and San Antonio, to 15 cents, **June 13.** Gasoline reduced 1 cent, Dallas, to 15 cents, **June 9.**

Kerosene Changes

Magnolia Petroleum—Kerosene prices reduced 1 cent, Muskogee, Tulsa and Oklahoma City, to 9 cents t. w., **June 8.**

Pennsylvania Market Moving Steady

CLEVELAND, June 13.—Refiners in Western Pennsylvania market report most products moving steady with little variance in quotations over the previous week. The tendency has been to narrow the range on many of the products which have shown as much as a 3 cents differential. Movement of U. S. Motor gasoline has increased due primarily to favorable weather conditions, although buyers are not purchasing very far in advance of needs. Fuel oils during the past week have been rather inactive with quotations of 4.50 to 5 cents. Several refiners say demand has picked up and are asking 4.75 to 5 cents today.

Neutral stocks are still scarce. Cylinder stocks are moving steady. Wax has shown strength during the past week and is firm at 3.125 to 3.25 cents.

Tank Wagon, Service Station Markets for Gasoline and Kerosene In United States Territories and Canada

(OIL PRICE HANDBOOK has t.w. and s.s. markets for whole year arranged for quick reference)

These Prices In Effect June 13, 1927

S. O. NEW JERSEY TERRITORY

	Gasoline		Total		Oil
	T.W.	Tax	T.W.	S.S.	T.W.
Atlantic City, N. J.	16	0	16	*	14
Newark, N. J.	16	0	16	18	14
Annapolis, Md.	16	4	20	23	14
Baltimore, Md.	16	4	20	23	10
Cumberland, Ind.	16	4	20	23	14
Washington, D. C.	14	2	16	17	12
Danville, Va.	16	4½	20.5	*	14
Norfolk, Va.	16	4½	20.5	20.5	14
Richmond	16	4½	20.5	23.5	14
Roanoke, Va.	16	4½	20.5	23.5	14
Petersburg, Va.	16	4½	20.5	23.5	14
Williamsburg, Va.	16	4½	20.5	*	14
Charleston, W. Va.	16	3½	19.5	22.5	14
Clarksburg, W. Va.	16	3½	19.5	22.5	14
Keyser, W. Va.	16	3½	19.5	*	14
Parkersburg, W. Va.	13	3½	16.5	19.5	14
Wheeling, W. Va.	16	3½	19.5	22.5	14
Charlotte, N. C.	16	4	20	23	14
Hickory, N. C.	16	4	20	23	14
High Point, N. C.	16	4	20	*	14
Mt. Airy, N. C.	16	4	20	23	14
Salisbury, N. C.	16	4	20	23	14
Charleston, S. C.	15	5	20	23	14
Columbia, S. C.	15	5	20	20	14

*Dealers set own prices. S. O. New Jersey does not operate station.

S. O. NEW YORK

Due to local price conditions at many points in S. O. New York territory, actual prices on both gasoline and kerosene are being made at under the posted tank wagon prices published below.

*New York City	19	0	19	23	15
Albany, N. Y.	19	0	19	21	15
Buffalo, N. Y.	15	0	15	18	14
†Rochester, N. Y.	15	0	15	18	14
Syracuse, N. Y.	19	0	19	21	15
Boston, Mass.	17	0	17	19	15
Augusta, Me.	19	3	22	25	15
Manchester, N. H.	17	2	19	21	15
Burlington, Vt.	19	2	21	23	15

*In steel barrels.

†It is reported that S. O. New York is selling a second grade of gasoline at Rochester, 4c below the above posted prices which apply on its Socony grade.

ATLANTIC REFINING

Pittsburgh, Pa.	16	*	16	*21	14
Philadelphia, Pa.	14	*	14	*19	14
Allentown, Pa.	16	*	16	*21	14
Erie, Pa.	14	*	14	*19	14
Scranton, Pa.	16	*	16	*21	14
Altoona, Pa.	16	*	16	*21	14
Dover, Del.	16	3	19	22	14
Wilmington, Del.	16	3	19	22	14
Providence, R. I.	17	1	18	20	15
Boston, Mass.	17	0	17	19	15
Springfield, Mass.	17	0	17	19	15
Worcester, Mass.	17	0	17	19	15
Hartford, Conn.	19	2	21	23	15
New Haven, Conn.	19	2	21	23	15

*2-cent state tax is collected by retail dealer and paid by him directly to state.

S. O. KENTUCKY

Lexington, Ky.	13	5	18	21	15.5
Louisville, Ky.	14	5	19	22	15
Covington, Ky.	15	5	20	23	15.5
Clarksdale, Miss.	13	4	17	20	13.5
Gulfport, Miss.	††13.5	4	††17.5	21.5	14
Jackson, Miss.	13	4	17	20	14.5
Natchez, Miss.	12.5	4	16.5	19.5	14
Vicksburg, Miss.	12.5	4	16.5	19.5	14
Birmingham, Ala.	14	4	18	21	15.5
Mobile, Ala.	13	4	17	20	15
Montgomery, Ala.	15	4	19	22	*16.5
Atlanta, Ga.	†14	3½	18	21	15
Augusta, Ga.	†15	3½	19	22	16
Macon, Ga.	†15	3½	19	22	16
Savannah, Ga.	†14	3½	18	20	14
Jacksonville, Fla.°	13	4	17	20	14
Miami, Fla.°	15	4	19	22	15.5
Tampa, Fla.°	12	4	16	19	15
Pensacola°	**14	4	**18	21	15

*Local privilege tax of 1 cent on gasoline and ½ cent on kerosene at Montgomery included.

†Georgia has ½ cent per gal. inspection fee on gasoline which is deducted as well as the state gasoline road tax of 3½ cents, to get the actual net tank wagon market to dealer.

°Florida gasoline prices include ½c inspection fee.

**Both tank wagon prices include 1c city tax at Pensacola, which went into effect Oct. 15, 1926.

††Both tank wagon prices at Gulfport include Harrison county privilege tax of 2c.

S. O. INDIANA

	Gasoline		Total		Oil
	T.W.	Tax	T.W.	S.S.	T.W.
Chicago, Ill.	14	0	14	16	12
Decatur, Ill.	14.2	0	14.2	16.2	12.1
E. St. Louis, Ill.	13.1	0	13.1	15.35	11.2
Joliet, Ill.	14.4	0	14.4	16.4	12.3
Peoria, Ill.	14.2	0	14.2	16.2	12.1
Quincy, Ill.	14.2	0	14.2	16.2	10.9
Indianapolis, Ind.	14.2	3	17.2	19.2	13.2
Evansville, Ind.	14	3	17	19	13
South Bend, Ind.	14.4	3	17.4	19.4	13.4
Detroit, Mich.	14.8	2	16.8	18.8	13.7
Grand Rapids, Mich.	14.7	2	16.7	18.7	13.6
Saginaw, Mich.	14.9	2	16.9	18.9	13.8
Green Bay, Wis.	14.6	2	16.6	18.6	12.4
Madison, Wis.	14.3	2	16.3	18.3	12.1
Milwaukee, Wis.	14.1	2	16.1	18.1	11.9
La Crosse, Wis.	15.2	2	17.2	19.2	13
Minneapolis, Minn.	12	2	14	16	12.9
Duluth, Minn.	13.5	2	15.5	17.5	12.9
Mankato, Minn.	13.1	2	15.1	17.1	12.7
Des Moines, Iowa	14	2	16	18	12.3
Davenport, Iowa	14.5	2	16.5	18.5	12.3
Sioux City, Iowa	14.1	2	16.1	18.1	11.9
Mason City, Ia.	12.5	2	14.5	16.5	12.3
St. Louis, Mo.	*13.6	2	15.6	17.9	11.3
Kansas City, Mo.	†12.9	2	14.9	16.9	10.6
St. Joseph, Mo.	†14.5	2	16.5	18.5	11.2
Fargo, N. D.	15	2	17	19	14.9
Grand Forks, N. D.	17.2	2	19.2	21.2	15.2
Minot, N. D.	16.9	2	18.9	20.9	14.9
Pierre, S. D.	15.5	3	18.5	20.5	13.9
Huron, S. D.	12.5	3	15.5	17.5	13.9
Wichita, Kans.	12.8	2	14.8	16.8	10.8
Bartlesville, Okla.	12.8	3	15.8	17.8	10.8

S. O. Indiana Q. D. A. schedule on tank wagon deliveries of gasoline, effective March 3 thru territory, except Wisconsin effective March 4: 50 gals. and over on delivery, 1c discount; 6,000 gals. and over per month, 1½c; 10,000 gals. and over per month, 2c; 15,000 gals. and over per month, 3c, except latter discount does not apply in Chicago.

Service station discounts: 200 gals. or more per month, and 2400 gals. or more per year, 2c per gal.

March 1, 1c discount on kerosene in 50 gal. dumps thru territory.

*Includes city tax of ½c.

†Includes city tax of 1c.

S. O. NEBRASKA

Omaha, Neb.	14.25	2	16.25	16.25	12.25
McCook	15.75	2	17.75	19.75	13.75
Norfolk	14.75	2	16.75	18.75	12.75
North Platte	15.75	2	17.75	19.75	13.50
Scottsbluff	15.25	2	17.25	19.25	13.00

CONTINENTAL OIL

Denver, Colo.	15	3	18	20	14.5
Pueblo, Colo.	14	3	17	17	14.5
Grand Junction, Colo.	18.5	3	21.5	23.5	18
Casper, Wyo.	15	3	18	20	13
Cheyenne, Wyo.	16	3	19	21	14.5
Butte, Mont.	19	3	22	22	19
Helena, Mont.	19.5	3	22.5	24.5	19
Salt Lake City, Utah	17.5	3½	21	23	17
Boise, Ida.	19.5	4	23.5	25.5	19
Twin Falls, Ida.	19.5	4	23.5	25.5	19
Albuquerque, N. M.	16	5	21	24	17

S. O. CALIFORNIA

Phoenix, Ariz.	18	3	21	25	21.5
Los Angeles, Cal.	12.5	2	14.5	18.5	15.5
Fresno, Cal.	13	2	15	19	16.5
San Francisco, Cal.	13	2	15	19	15.5
Reno, Nev.	17	4	21	25	19
Portland, Ore.	13.5	3	16.5	20.5	16.5
Seattle, Wash.	13.5	2	15.5	19.5	16.5
Spokane, Wash.	17.5	2	19.5	23.5	20.5
Tacoma, Wash.	13.5	2	15.5	19.5	16.5

S. O. LOUISIANA

Little Rock, Ark.	13	5	18	21	12
Alexandria, La.	13	2	15	18	†14
Baton Rouge, La.	12	2	14	17	†12.5
Lake Charles, La.	13.5	2	15.5	18.5	†14
New Orleans, La.	*13.5	2	*15.5	*18.5	*14
Shreveport, La.	12	2	14	17	†13
Lafayette, La.	13	2	15	18	†13.5
Bristol, Tenn.	16	3	19	22	14
Chattanooga, Tenn.	16.5	3	19.5	22.5	15
Knoxville, Tenn.	16.5	3	19.5	22.5	15
Nashville, Tenn.	13.5	3	16.5	19.5	15
Memphis, Tenn.	10	3	13	16	14

*New Orleans gasoline prices include 1c parish tax in addition to 2c state tax, and kerosene prices include 1c state tax and 1c parish tax.

†Kerosene prices in Louisiana include 1c state tax.

S. O. OHIO

	Gasoline		Total		Oil
	T.W.	Tax	T.W.	S.S.	T.W.
All Ohio points	16	3	19	21	15

MAGNOLIA PETROLEUM

Muskogee, Okla.	11	3	14	17	9
Oklahoma City	11	3	14	17	9
Tulsa, Okla.	11	3	14	17	9
Fort Smith, Ark.	13	5	18	21	12
Little Rock, Ark.	13	5	18	21	12
Texarkana, Ark.	†15	5	†*20	†*20	12
Dallas, Tex.	†12	3	†15	†15	11
Fort Worth, Tex.	†12	3	†15	†15	10
Houston, Tex.	††16	3	††19	††19	15
San Antonio, Tex.	†12	3	†15	†15	11
El Paso, Tex.	**16	3	**19	**19	16

*Within city of Texarkana the state tax on gasoline is 3c per gal. conforming with the Texas state tax. In Texarkana district outside of the city the 5c Arkansas tax applies.

†3c per gal. discount to dealers.

**2c per gal. discount to dealers at El Paso, Feb. 28.

††4c per gal. discount to dealers at Houston, March 16, 1927.

V. M. & P. NAPHTHA

(Changes ordinarily occur coincident with gasoline price changes)

	Oleum Spirits	V.M. & P. Naphtha	Cleaner Naphtha
Chicago	16	18	18
Detroit	17.7	19.7	19.7
Kansas City	16.2	†18.2	†18.2
Milwaukee	16.7	*20.7	*20.7
Minneapolis	*20	*22	*22
St. Louis	15.9	17.9	17.9
New York	..	19	

*Includes 2c state tax.

†Includes 1c city tax.

CANADA

(Per Imperial Gallon, which is 1.2 American Gallons)

ONTARIO

	Gasoline		Total		Oil
	T.W.	Tax	T.W.	S.S.	T.W.
Toronto	19.5	3	22.5	26	21
Ottawa	19.5	3	22.5	26	21
Cochrane	24.5	3	27.5	36	26
Ft. William	22.5	3	25.5	29	23.5

MANITOBA

Winnipeg	24.5	3	27.5	31	23.5

SASKATCHEWAN

Regina	27.5	0	27.5	32	27.5

ALBERTA

Edmonton	26.5	3	29.5	33	25.5
Calgary	24.5	3	27.5	31	23.5

BRITISH COLUMBIA

Vancouver	20	3	23	27	21

QUEBEC

Montreal	20.5	3	23.5	27	21
Quebec City	22.5	3	25.5	29	23
Three Rivers	22.5	3	25.5	29	23

NEW BRUNSWICK

St. John	24.5	3	27.5	32	24
Moncton	24.5	3	27.5	32	24

NOVA SCOTIA

Halifax	24.5	3	27.5	32	24
Sydney	26.5	3	29.5	34	26

PRINCE EDWARD ISLAND

Charlottetown	24.5	3	27.5	31	24

Note: In districts surrounding these points 1c additional is added to city price.

Prices of Export Gasoline are Higher; Waxes Also Advance; Lubes Steady

By Special Correspondent
NEW YORK, June 13.

SEVERAL bulk sales of gasoline and kerosene for export were closed last week and prices were 0.25 to 0.50 cent a gallon net higher. The sharp increase in domestic consumption was held largely responsible for the export buying. Export buyers apparently feel that the market is due for a rise and are covering forward requirements.

Paraffin waxes for the first time in weeks showed signs of improvement and several grades were higher. Fuel oils were quiet. Lubricating oils were steady. Demand for gas oil was below expectations.

EXPORT GASOLINE—New York

A large exporter was working on an inquiry from France for 45,000 barrels of U. S. Motor and 64-66, 375 e. p. gasoline for August shipment. It was persistently rumored a leading refiner sold a mixed cargo of U. S. Motor and 64-66 gravity gasoline with prime white kerosene for July shipments to the Continent. A Philadelphia refiner sold a cargo of 45,000 barrels of 41-43 prime white kerosene at 5.125 cents; U. S. Motor gasoline at 7.50 cents and 64-66, 375 e. p. gasoline at 8.50 cents July-August shipments from its Gulf plant. New York Harbor refiners were asking 9 cents a gallon for U. S. Motor gasoline at refineries.

Cased gasoline was quiet at 24.90 cents a gallon. There was an inquiry from the Near East for 30,000 cases of U. S. Motor and 64-66, 375 e. p. gasoline for July shipment. This inquiry is still in the field.

EXPORT GASOLINE—Gulf Port

A Gulf refiner was reported to have sold 50,000 barrels of U. S. at 7.50 cents and 64-66, 375 e. p. gasoline at 8.375 cents for July-August shipment to either France or Germany. There was an inquiry from France for 50,000 barrels of U. S. Motor and 64-66, 375 e. p. gasoline, and prime and water white kerosene for August shipment but this has not been placed.

U. S. Motor gasoline was 7.50 to 8 cents a gallon Saturday, 60-62, 400 e. p. 7.75 to 8.25 cents; 61-63, 390 e. p. 8 to 8.50 cents and 64-66, 8.50 cents a gallon. To higher prices in the Mid-Continent and the improved domestic demand was attributed the spurt in foreign orders.

Cased gasoline was also higher and U. S. Motor was held at $1.80 and 64-66, 375 e. p. at $1.90 a case in cargo lots.

EXPORT KEROSENE—New York

Export demand for kerosene did not improve. Leading New York harbor refiners were asking 6.75 cents for 41-43 prime white and 7 cents for 43-45 water white at the refineries. No bulk movements were disclosed except with gasoline as already mentioned.

Cased kerosene was in fair demand. A Chinese buyer purchased 25,000 cases of prime and water white for August shipments from an Independent refiner. Another Independent was working on an inquiry from Japan for 30,000 cases of prime and water white for July-August shipment.

EXPORT KEROSENE—Gulf Ports

Refiners had higher ideas Saturday and were asking 5 to 5.25 cents for 41-43 water white and 6 to 6.25 cents for 44 water white in bulk. The export inquiry was more active but no straight bulk kerosene sales were reported. However, refiners reported less competition and a better all around feeling. Europeans are expected to begin buying their fall requirements soon.

Cased kerosene was higher in sympathy with bulk kerosene. For 41-43 water white in cases the price was $1.50 and 44 water white was $1.60 a case, in cargo lots, a 5-cent advance for the week. It was reported an Independent refiner sold 40,000 cases of kerosene for August shipment to Australasia but confirmation was lacking.

GAS OIL—New York

New York Harbor refiners were offering 36-40 distillate at 5.50 cents a gallon at refineries while 28-34 was quoted at 5.25 cents a gallon. Export buyers showed little interest and no bulk inquiries were heard of.

GAS OIL—Gulf Ports

The market was quiet but steady. One refiner is reported to have sold 45,000 barrels for 32 plus dark oil for July-August shipment to the Continent at 4 cents a gallon. Otherwise the market was dull. The domestic demand lagged. The improvement in gasoline, however, has led many refiners to look for increased cracking shortly. Translucent 26-28 gas oil was offered more freely at 4.25 cents a gallon at refineries.

LUBRICANTS—New York

Pennsylvania lubricating oils have been steady. Refiners are not inclined to make concessions to stimulate buying which is steadily increasing. Export buying is heavier although the bulk of orders still call for 300 and 400 barrels. A French buyer is negotiating for 1,000 barrels of Pennsylvania cylinder oils for July shipment to France. Pennsylvania 600 steam refined unfiltered cylinder oil was offered at 16.50 cents a gallon in barrels, New York. Red engine oils were in better domestic demand.

LUBRICANTS—Gulf Ports

It was persistently reported an Independent refiner had sold a cargo of 35,000 barrels of assorted lubricants for July-August shipment to France but this lacked confirmation. Domestic demand for Texas lubes was more active and many buyers who have been holding off, are now in the market for their summer supplies. One refiner was reported working on a part cargo of 15,000 barrels of assorted lubes for July shipment to the Continent.

PETROLATUMS

Domestic demand for snow white petrolatum was slightly more active. Export buying was also a trifle more spirited. Medicinal oils were dull.

WAXES—New York

Foreign demand for white crude scale wax improved considerably. Domestic consumption is picking up and at least one large refiner is reported well sold up. Spot white crude scale wax is held at 3.25 cents a pound and 124-126 is 3.375 cents a pound, New York.

WAXES—Gulf Ports

There was a better tone to the Gulf wax market. Export inquiry was much better although actual demand did not improve. Domestic buying was heavier. Stocks are still fairly heavy. There were two inquiries from the United Kingdom for 100 tons of white crude scale each. Prices Saturday were: White crude scale 124-126 A. m. p. 2.85 cents; semi-refined 124-126 A. m. p. 2.90 cents; yellow crude scale 2.75 cents; fully refined 123-125 and 125-127 A. m. p. 3.875 cents; 128-130 A. m. p. 4 cents; 133-135 A. m. p. 5 cents and 135-137 A. m. p. 5.50 cents.

Complete Export Markets

(Export markets for whole year given in OIL PRICE HANDBOOK. Each volume carries refinery, tank wagon, crude and export markets—complete for years 1924-1925-1926)

New York Export Market

GASOLINE	June 13		June 6
U. S. Motor f. o. b. New York Harbor...	9.00	8.75	9.00
U. S. Motor cases	24.90		24.90
KEROSENE			
43-45 150 W. W. Bulk Ref.	7.00		7.00
41-43 Prime White Bulk Ref.	6.75		6.75
43-45 150 W. W. Cases	17.15		17.15
42-44 110 S. W. Cases	16.15		16.15
GAS OIL			
36-40 Bulk Refinery	5.50		5.50
28-34 Bulk Refinery	5.25		5.25
MEXICAN BUNKER OIL			
Grade C. f. o. b. ref. Bulk	$1.65		$1.65
Diesel Oil f. o. b. ref. Bulk	$2.20		$2.20

LUBRICATING OILS

The following are cooperage basis f. o. b. New York, products being manufactured by inland refineries.

CYLINDER OILS (per Gallon in Barrels)		
1 inch Immersion Test; All Penna. Products		
Bright Stock dark	42.00	42.00
Filtered D 600	35.00	35.00
Filtered E 600-Warren	26.75	26.75
Unfiltered 600 s. r.	16.50	16.50
Unfiltered 650 s. r.	19.00	19.00
600 Flash s. r.	23.00	23.00
630 Flash	36.00	36.00
RED ENGINE OILS (Per Gallon in Barrels) (Viscosity at 100°)		
300 Vis. No. 6½ color	22.00	22.00
250 Vis. No. 6 color	21.50	21.50
200 Vis. No. 6 color	20.00	20.00
PALE ENGINE OILS (Per Gallon in Barrels) (Viscosity at 100°)		
230 Vis. No. 3¾ color	26.00	26.00
180 Vis. No. 3¼ color	21.50	21.50
160 Vis. No. 2¼ color	16.75	16.75
MOTOR OILS (Per Gallon in Barrels) (Viscosity at 100°)		
600 No. 6 color	37.00	37.00
500 No. 7 color	36.00	36.00
400 No. 6½ color	33.00	33.00
300 No. 6 color	29.00	29.00
200 No. 3¾ color	23.50	23.50

MEDICINAL OILS (Includes Price of Drums) (Penna Stocks)	June 13	June 6
Domestic 875-.885 s. g.	.85	.85
Domestic 865-.870 s. g.	$ .75 - .80	$ .75 - .80
Russian 885-.890 s. g. 325-330 vis.	$ .90 - .95	$ .90 - .95

WAXES (Penna Stocks) (In Cents per Pound, F. A. S. Carload Lots)

WHITE CRUDE SCALE (Shipped in Bbls.)		
122-124 A. m. p.	3.25	2.70
124-126 A. m. p.	3.375	2.75
FULLY REFINED (Shipped in Burlap Bags)		
123-125 A. m. p. Philadelphia	4.00	4.00
125-127 A. m. p.	4.00	4.00
128-130 A. m. p.	4.125	4.125
130-132 A. m. p.	4.50	4.375
133-135 A. m. p.	5.50	5.375
135-137 A. m. p.	5.875	5.75
YELLOW CRUDE SCALE		
124-126 A. m. p.	3.00	2.625
PETROLATUMS (Penna Stocks) Per Pound		
Dark Green	2.00	2.00
Veterinary	3.125	3.125
Light Amber	3.750	3.750
Dark Amber	3.375	3.375
Cream	5.75	5.75
Lily White	7.25	7.25
Snow White	8.375	8.375

Gulf Export Market

GASOLINE F. O. B. Gulf Oil Terminals, Texas and Louisiana (Shipments of 20,000 Bbls. and over)	June 13	June 6
U. S. Motor Bulk	7.50	7.25
60-62 400 e. p. Bulk	7.75	7.25
61-63 390 e. p. Bulk	8.00	7.50 - 7.625
64-66 375 e. p. Bulk	8.50	8.25
U. S. Motor, Cases (cargo lots)	$1.80	$1.65
64-66 Cases (cargo lots)	$1.90	$1.75
KEROSENE		
Water White, 43-45 Bulk	6.00 - 6.25	6.125
Prime White, 41-43 Bulk	5.00 - 5.25	5.125
Water White, cases (cargo lots)	$1.60	$1.55
Prime White, cases (cargo lots)	$1.50	$1.45
DOMESTIC GAS AND BUNKER OIL		
26-28, gravity, Bulk*	4.125	4.125
32 plus, bulk, Dark	4.00	4.00
Grade C, Bunker oil	$1.40	$1.40
Cargoes	$1.30	$1.30

*Translucent through neck of a 4 oz. bottle.

MEXICAN CRUDE AND BUNKER OILS, F. O. B. Steamer Tampico	
Heavy, Panuco crude Taxes to be added	$1.13
Grade C, Bunker oil, F. O. B. Tampico, For Bunkering Purposes, taxes paid	$1.55

SOUTH TEXAS (Viscosity at 100° F; cold test 0)
(Tanker, F. O. B. Houston)

LUBRICATING OILS	June 13	June 6
100 Vis. No. 2 Unfiltered Pale	6.00	6.00
150 Vis. No. 2½ Unfiltered Pale	8.50	8.50
200 Vis. No. 3 Unfiltered Pale	9.00	9.00
300 Vis. No. 3 Unfiltered Pale	10.00	10.00
500 Vis. No. 3½ Unfiltered Pale	12.50	12.50
200 Vis. No. 5½ Red Oil	8.00	8.00
300 Vis. No. 5½ Red Oil	9.00	9.00
500 Vis. No. 6 Red Oil	10.50	10.50

Pacific Export Market

(Quotations are at seaboard. Los Angeles in Cargo lots)

	June 13	June 6
Gasoline, U. S. Motor—53°-55°	6.00 - 7.00	6.00 - 7.00
Gasoline, U. S. Motor—blends and special cuts	7.00 - 8.00	7.00 - 8.00
Gas Oil, 30°-34° in bbls.	$1.00 - 1.05	$1.00 - 1.05
Diesel Oil, 27°—plus in bbls.	$ .95 - 1.05	$ .95 - 1.05
Bunker Oil, 14°-18° in bbls.	$ .85 - 1.00	$ .75 - .58
Fuel Oil, 14°-18° in bbls.	$ .70 - .75	$ .70 - .75
Kerosene, W. W. 38°-40°, 125-150 flash (Gals.)	5.00 - 6.00	5.00 - 6.00
Cased Goods		
Gasoline, U. S. Motor	$2.00 - 2.25	$2.00 - 2.25
Kerosene, W. W. 38°-40°, 125-150 flash	$1.50 - 1.60	$1.50 - 1.60

N. Y. Domestic Market

The following light oil, gas and fuel prices are F. O. B. New York refineries being products made from Domestic (including California) and Mexican Crudes

GASOLINE	June 13	June 6
U. S. Motor tank cars, f.o.b. N. Y. refinery	9.00	8.75 - 9.00
U. S. Motor, tank cars, delivered Greater N. Y.	10.00	9.75 -10.00
California U. S. Motor, cargoes, laid down N. Y. cost price	8.00	8.00
Philadelphia, U. S. Motor, tank cars f. o. b. Philadelphia refinery	9.00	9.00
Philadelphia U. S. Motor, tank cars delivered nearby trade	10.00	10.00
KEROSENE		
43-45 150 W. W. Tank Cars delivered greater N. Y.	8.00	8.00
41-43, Bulk Ref. Prime	6.75	6.75 - 7.00
FUEL OILS		
Grade C Bunker f. o. b. N. Y. Ref.	$1.65	$1.65
Diesel Oil f. o. b. Refinery	$2.20	$2.20
Gas Oil, 36-40, Bulk Refinery	5.50	5.50
Gas Oil, 28-34, Bulk Refinery	5.25	5.25
Furnace Oil, 38-42, Bulk Refinery	6.50	6.50
Furnace Oil from Tank Wagons	10.00	11.00

BUNKER OIL—New York

Export demand for bunker oil did not improve. There was an inquiry from the United Kingdom for 50,000 barrels for nearby shipment but an order was not placed. New York Harbor refiners were still asking $1.65 a barrel for grade C, f.o.b. New York Harbor refineries, and $1.715 cents a barrel f.a.s. New York Harbor. Diesel oil demand was more active and the price was steady at $2.20 a barrel, f.o.b. New York Harbor refinery.

BUNKER OIL—Gulf Ports

There was an inquiry from the Continent for 50,000 barrels of bunker C oil for July shipment but sellers of cargo lots were scarce. The last sales price reported was $1.35 a barrel f.o.b. New Orleans terminal. Demand for bunkering oil was more active and a good business was done at $1.40 a barrel, New Orleans. At Tampico grade C for bunkering was $1.55 a barrel including taxes while cargoes were scarce and no offerings were reported. Heavy Panuco crude oil was quoted at $1.13 a barrel at Tampico, taxes to be added.

Gulf Lube Price Range Narrows

HOUSTON, June 11.—Gulf Coastal lubricant markets have changed but little in the last few weeks. Manufacturers report sales prices are ranging only ½-cent whereas previously the range was 1 cent. Movement is normal for the season.

Crude Oil Prices, as Posted by Major

(Crude prices for years 1924-1925-1926 in

EASTERN FIELDS

(Posted by Joseph Seep Purchasing Agency)

Penna. Grade Oil in New York Transit Lines (Alleghany, N. Y. District)	$2.90
Bradford District Oil in National Transit Lines (Bradford District)	2.90
Penna. Grade Oil in National Transit Lines (Other Pennsylvania)	2.80
Penna. Grade Oil in Southwest Penna. Pipe Lines (Other Pennsylvania)	2.80
Penna. Grade Oil in Eureka Pipe Lines (West Virginia)	2.75
Penna. Grade Oil in Buckeye Pipe Lines (Macksburg, O. district)	2.60
Keister Grade in National Transit Lines (Butler Co.)	1.10
Cabell Grade in Eureka Pipe Lines (West Virginia)	1.40
Corning Grade in Buckeye Pipe Lines (Ohio)	1.45
Corning, O. heavy grade	1.35
*Somerset Oil in Cumberland Pipe Lines (Kentucky)	1.50
Ragland Grade in Cumberland Pipe Lines (Kentucky)	.95

*Somerset oil run prior to Oct. 1922, I. takes price of 6 cents lower than above quotations.

(Posted by Stoll Oil Refining Co.)

Oil City, Ky., oil in Stoll lines	$1.50

CENTRAL STATES FIELDS

Posted by Ohio Oil Co.

Effective March 14, 1927

Wooster	$1.77	Plymouth	$1.33
Lima	1.71	West. Kentucky	1.33
Waterloo	1.35	*Canadian Petro.	2.11
Indiana	1.48	*Oil Springs	2.18
Princeton	1.60	*Posted by Imperial Oil Ltd.	
Illinois	1.60		

OKLAHOMA, KANSAS And NORTH TEXAS

Prices of Prairie Oil & Gas Co.

(In Oklahoma, Kansas, North and East Central Texas)

Effective March 12, 1927

28-28.9	$1.12	35-35.9	$1.26
29-29.9	1.14	36-36.9	1.28
30-30.9	1.16	37-37.9	1.30
31-31.9	1.18	38-38.9	1.32
32-32.9	1.20	39-39.9	1.34
33-33.9	1.22	40-40.9	1.36
34-34.9	1.24	41-41.9	1.38
42-42.9	$1.40	48-48.9	$1.52
43-43.9	1.42	49-49.9	1.54
44-44.9	1.44	50-50.9	1.56
45-45.9	1.46	51-51.9	1.58
46-46.9	1.48	52 and above	1.60
47-47.9	1.50		

Above schedule met on March 12, by Gulf, Mid-Continent Pet. Corp., and Empire; by Carter, Humble and the Texas Co. on March 14.

Humble Oil & Refining Co. Prices

(Ranger, North Texas, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie, Moran and Nocona crudes all in Texas.)

March 14, same schedule as Prairie in above fields except that Humble is paying 2c less for each degree of gravity on oil below 28°.

Mirando, Tex.	$1.00

Magnolia Petroleum Co.

(In Oklahoma, Kansas and North and East Central Texas)

Effective May 5

Below 33	$1.05	43-43.9	$1.27
33-33.9	1.07	44-44.9	1.29
34-34.9	1.09	45-45.9	1.31
35-35.9	1.11	46-46.9	1.33
36-36.9	1.13	47-47.9	1.35
37-37.9	1.15	48-48.9	1.37
38-38.9	1.17	49-49.9	1.39
39-39.9	1.19	50-50.9	1.41
40-40.9	1.21	51-51.9	1.43
41-41.9	1.23	52 and above	1.45
42-42.9	1.25		
Corsicana heavy			$1.00

Carter Oil Co.

(Oklahoma and Kansas)

March 14, same schedule as Prairie.

PANHANDLE, TEXAS

Humble Oil & Refining Co.

Effective March 14

Hutchinson, and Carson Counties	$0.95

Gray and Wheeler Counties:

28-28.9	$ .80	37-37.9	$ .98
29-29.9	.82	38-38.9	1.00
30-30.9	.84	39-39.9	1.02
31-31.9	.86	40-40.9	1.04
32-32.9	.88	41-41.9	1.06
33-33.9	.90	42-42.9	1.08
34-34.9	.92	43-43.9	1.10
35-35.9	.94	44 and above	1.12
36-36.9	.96		

WEST TEXAS

(Crane, Upton and Crockett Counties)

Humble Oil & Refining Co.

Effective March 14

Below 26	$ .70	31-31.9	$ .82
26-26.9	.72	32-32.9	.84
27-27.9	.74	33-33.9	.86
28-28.9	.76	34-34.9	.88
29-29.9	.78	35-35.9	.90
30-30.9	.80	36 and above	.92

NORTH LOUISIANA — ARKANSAS FIELDS

Prices of Standard Oil Co. of Louisiana Caddo, Homer, Haynesville, Bull Bayou, El Dorado, Crichton and De Soto

Effective March 14, 1927

Below 28	$1.10	40-40.9	$1.36
28-28.9	1.12	41-41.9	1.38
29-29.9	1.14	42-42.9	1.40
30-30.9	1.16	43-43.9	1.42
31-31.9	1.18	44-44.9	1.44
32-32.9	1.20	45-45.9	1.46
33-33.9	1.22	46-46.9	1.48
34-34.9	1.24	47-47.9	1.50
35-35.9	1.26	48-48.9	1.52
36-36.9	1.28	49-49.9	1.54
37-37.9	1.30	50-50.9	1.56
38-38.9	1.32	51-51.9	1.58
39-39.9	1.34	52 and above	1.60

Smackover, below 24	$1.00
do 24 and above	1.25
Bellevue	1.25
Cotton Valley	1.00
**Urania, La	1.00
†East El Dorado	1.00

**Posted by Louisiana Oil Refining Corp.

†Posted by Magnolia Petroleum Co.

STEPHENS, ARKANSAS

Atlantic Oil Producing Co. and Louisiana Oil Refining Corp.

Below 28	$1.00	30-30.9	$1.06
28-28.9	1.02	31-31.9	1.08
29-29.9	1.04	32 and above	1.10

GULF COASTAL

Posted by Humble Oil & Refining Co.

Effective March 14

Grades A	$1.20	29-29.9	$1.25
Grades B:		30-30.9	1.27
Below 25	1.15	31-31.9	1.29
25-25.9	1.17	32-32.9	1.31
26-26.9	1.19	33-33.9	1.33
27-27.9	1.21	34-34.9	1.35
28-28.9	1.23	35 and above	1.37

Fields classified as A and B are Spindletop, Goose Creek, Hull, Liberty, Sour Lake, West Columbia, Orange, Boling and Pierce Junction. All other fields are Grades A only.

California Gasoline Raised ½ Cent; Tanker Rates are Cheaper

Staff Special

LOS ANGELES, June 11.

THE California gasoline market is improving further. Gasoline for shipment within Pacific Coast trade territory this week advanced about 0.50 cent. Quotations now range 8 to 9 cents a gallon. Major refiners are not competing for this business. Their asking price within the state is 11.50 cents. Virtually all this business is going to the small Independent refiners. Early this week one or two cars of gasoline were sold at 7.50 cents, but later not even one car could be bought at this low price.

The Los Angeles cut price situation is also showing real improvement, with the major companies standing firm in their refusal to sell their products to Independent service stations which continue to exhibit signs offering gasoline at 2 to 3 cents under the posted market of 18.50 cents, Los Angeles area, including tax. Standard Oil Co., Pan American Petroleum Co. and California Petroleum Corp. are now refusing to sell to cut price stations. Similar action had been taken by the Union Oil Co., Shell Co. and Richfield Oil Co. The Associated Oil Co., it is said, continues to try to convince its customers that price cutting is bad for all and has succeeded in most cases to overcome price fights.

Export gasoline quotations are unchanged at 6 to 7 cents, Los Angeles harbor. This means that it is possible to pay 6 cents a gallon here and move to New York in tankers, laying the product down on East Coast at 8 cents. Tankers are cheaper and more plentiful at 84 cents a barrel and it is reported that still lower tariffs can be expected in the next few weeks.

The fuel oil market is slightly stronger, especially for export. This is brought about through the fair position most of the larger refiners find themselves. For instance recently.

Pan American recently secured the Pacific Coast naval contract for about 4,600,000 barrels of fuel oil this year, at $0.645, a barrel. This week the same company was awarded a contract to furnish the shipping board with 400,000 barrels from June to November at $0.69. This permits Pan American to move on these two contracts an average of 400,000 barrels per month for the next 12 months.

Richfield has contracted to sell 1,000,000 barrels of fuel over a period, but buyer and price have not been revealed. Small Independent refiners, without deep water outlets, are still selling their fuel oil in tank cars at $0.65 to $0.85 a barrel. But this business is not large.

Purchasers, in All Fields (in Effect, June 13, 1927)

OIL PRICE HANDBOOK published annually)

GULF COASTAL
Prices of The Texas Co.

(Effective March 14)

Grades A	$1.20	*Grades B	$1.15
‡Grades B (light crude):			
35-35.9	$1.37	38-38.9	$1.43
36-36.9	1.39	39-39.9	1.45
37-37.9	1.41	40 and above	1.47

*Grades B include all heavy crudes which do not meet tests for Grades A or for Gulf Coast light crude.

‡The Texas Co.'s gravity and price schedule on oil below 35° is same as Humble's postings on Grades B.

ROCKY MOUNTAIN FIELDS
Prices of Ohio Oil Co. and Midwest Refining Co.

(Salt Creek prices effective March 12)

‡Salt Creek 29-29.9	$1.14
" " 30-30.9	1.16
" " 31-31.9	1.18
" " 32-32.9	1.20
" " 33-33.9	1.22
" " 34-34.9	1.24
" " 35-35.9	1.26
" " 36-36.9	1.28
" " 37 and above	1.30
Elk Basin	1.33
Grass Creek light	1.33
Big Muddy	$1.25
Lance Creek	1.33
Rock Creek	1.25
Mule Creek	1.30
Rex Lake	1.10
‡Osage	1.33
‡Cat Creek, Mont.	1.33
Sunburst, Mont.	1.35
‡Hogback, N. Mex.	1.38
Artesia, N. Mex.	1.00

‡Posted by Midwest Refining Co. Midwest also buys Grass Creek light and Elk Basin.

The Texas Co. buys Salt Creek and Big Muddy crude.

CALIFORNIA
Standard Oil Co. of California

Santa Maria and Ventura Posted by Union Oil Co.

Gravity	Signal Hill Seal Beach Huntington Beach	Inglewood Torrance	Whittier La Habra	Newhall, McKittrick, Kern River	Olinda-Brea Canon, Richfield	Athens-Rosecrans Dominguez	Montebello	Coyote Hills	Santa Fe Springs	Midway, Sunset Buena Vista & Elk Hills	Lost Hills	Coalinga	Wheeler Ridge	Santa Maria	Ventura
14-14.9	$ .85	$ .85	$ .85	$ .75	$ .85	....	$ .85	$ .85	....	$ .75	$ .75	$ .75	$ .75	$ .85	$ .85
15-15.9	.85	.85	.85	.75	.85	....	.85	.85	....	.75	.75	.75	.75	.85	.85
16-16.9	.85	.85	.85	.75	.85	....	.85	.85	....	.75	.75	.75	.75	.85	.85
17-17.9	.85	.85	.85	.75	.85	....	.85	.85	....	.75	.75	.75	.75	.85	.85
18-18.9	.85	.85	.85	.75	.85	....	.85	.85	....	.75	.75	.75	.75	.85	.85
19-19.9	.85	.85	.85	.75	.85	....	.85	.85	....	.75	.75	.75	.75	.85	.85
20-20.9	.85	.85	.85	....	.85	....	.85	.85	....	.77	.77	.76	.78	.85	.85
21-21.9	.86	.86	.85	....	.86	....	.85	.86	....	.79	.79	.77	.81	.85	.85
22-22.9	.87	.87	.85	....	.87	....	.85	.87	....	.81	.81	.78	.85	.85	.85
23-23.9	.88	.88	....	....	.88	....	.85	.88	....	.83	.83	.79	.89	.85	.85
24-24.9	.89	.89	....	....	.89	$ .89	.85	.89	.85	$ .85	.85	.80	.93	.85	.85
25-25.9	.90	.90	....	....	.90	.90	.86	.90	.85	.87	.87	.81	.97	.86	.86
26-26.9	.92	.92	....	....	.92	.92	.87	.91	.85	.89	.89	.83	1.01	.87	.87
27-27.9	.94	.94	....	....	.94	.94	.88	.92	.85	.91	.91	.85	1.05	.88	.88
28-28.9	.96	.96	....	....	.96	.96	.89	.93	.86	.93	.93	.87	....	.89	.89
29-29.9	.98	....	....	....	.98	.98	.90	.94	.87	.96	.96	.89	....	.91	.91
30-30.9	1.00	....	....	....	1.00	1.00	.91	.95	.88	.99	.99	.91	....	.93	.93
31-31.9	1.03	....	....	....	....	1.03	....	....	.89	1.02	1.02	.93	....	....	.95
32-32.9	1.06	....	....	....	....	1.06	....	....	.91	1.05	1.05	.95	....	....	.97
33-33.9	....	....	....	....	....	1.09	....	....	.93	1.08	1.08	.97	....	....	.99
34-34.9	....	....	....	....	....	1.12	....	....	.95	....	1.11	.99	....	....	1.01
35-35.9	....	....	....	....	....	1.15	....	....	.97	....	....	1.01	....	....	1.03
36-36.9	....	....	....	....	....	1.18	....	....	.99	....	....	....	....	....	1.06
37-37.9	....	....	....	....	....	1.21	....	....	1.01	....	....	....	....	....	1.09
38-38.9	....	....	....	....	....	1.24	....	....	1.03	....	....	....	....	....	1.12
39-39.9	....	....	....	....	....	1.27	....	....	1.06	....	....	....	....	....	1.15
40-40.9	....	....	....	....	....	1.30	....	....	1.09	....	....	....	....	....	....
41-41.9	....	....	....	....	....	1.33	....	....	1.12	....	....	....	....	....	....
42-42.9	....	....	....	....	....	1.36	....	....	1.15	....	....	....	....	....	....

*Union Oil Co. also purchases Long Beach Crude and is maintaining the same gravity and price schedule in that field as the Standard maintains in Signal Hill and Huntington Beach fields. The Union also buys and pays the same prices as the Standard in the Rosecrans-Dominguez fields, on gravities ranging from 14 degrees to and including 24.9 degrees and in Santa Fe Springs, on gravities ranging from 20 to and including 23.9 degrees.

REFINERS' and COMPOUNDERS' SUPPLIES

Following are the average market prices for the week on materials used by refiners and compounders f. o. b. shipping point as effective this date.

Refiners' Supplies

	June 13	June 6
Soda Ash light 58% bags, cwt.	$1.325	–$1.325
Silicate of Soda 60 deg. drums, cwt.	$1.65	$1.65
Sal Soda wks.	$0.90–$1.10	1.10
Caustic Soda 76% solid cwt.	$3.00	3.00
Chloride of Lime, cwt. works	$2.00	2.00
Sulphuric Acid 60 deg. tank cars f. o. b. shipping point, per ton	$10.50-11.00	10.50–11.00
Liquid Chlorine tank cars works, lb.	4	4

Compounders' Supplies (Open Market)

	June 13	June 6
Vegetable Oils—		
Linseed carloads spot, lb.	11.2	11.3
June	11.2	11.3
Tanks spot	10.4	10.5
*Soya Bean Tanks, Coast, lb.	9.50	9.50
Castor Oil—		
No. 1 Carlots, Bbls.	13.50	13.50
No. 3 Carlots, Bbls.	13.00	13.00
Animal Oils—		
English Degras	5.375	5.375
Domestic Degras, bbls., carloads, lb.	4.50	4.50
Oleic Acid—		
Dist. Bbls., lb.	9.50	9.25
Saponified Bbls., lb.	9.75	9.50
Lard Oils—		
Prime Winter Strained 2 to 1½ ffa. 40-45c.t.lb.	14.875	14.875
Extra Winter Strained 2 to 4½ ffa. 40-45c.t.lb.	12.75	12.75
Extra 4 to 5 ffa. 40-45c.t.lb.	11.875	11.875
Extra No. 1 7 to 10 ffa. 40-59c.t.lb.	11.375	11.375
No. 1 15 to 18 ffa. 40-45c.t.lb.	10.50	10.50
No. 2 22 to 23 ffa. 40-45c.t.lb.	10.00	10.00
Prime Edible Tallow under 1¾ ffa. 40-45c.t.N.Y., lb.	8.375	8.375
Tallow acidless, lb.	10.75	10.75
Lard Stearine, lb.	15.00	15.00
Oleo Stearine, lb.	9.50	9.75
Neatsfoot Oil—		
Pure, bbls.-lb.	13.25	– 13.25
Extra, bbls.-lb.	11.375	11.375
No. 1, bbls.-lb.	10.25	10.25
Cold pressed, lb.	17.75	17.75
Fish Oils—		
Menhaden Oil		
Light pressed, gal.	60	60
White, gal.	66	66
Yellow bleached, gal.	64	64
Whale, extra winter bleached, gal.	82	82
Naval Stores—		
Turpentine, N. Y., gal.	60.50	62
Turpentine†, gal.	54.50	54.50
Rosin, B. N. Y.	$10.10	$10.10
Rosin, F. N. Y., bbl.	$10.325	$10.15
Rosin, B†, bbl.	$ 8.50	$ 8.60
Rosin, F†, bbl.	$ 8.55	$ 8.65
Rosin Oil 1st run, gal.	57	57
Rosin Oil 2nd run, gal.	62	62
Pine Tar—		
Kiln Burnt, bbl.	$16.00	$16.00
Retort, bbl.	$16.00	$16.00

†Savannah, Ga., market.
*Nominal.

Alcohol—Denatured—		
Formula 5		
Bbls., gal.	50.5	50.5
Drums, gal.	43.5	43.5

OIL STOCKS AND FINANCES

National Petroleum News

Standard Dividends Set Record for Second Quarter Payments

NEW YORK, June 11.

CASH dividends paid by Standard Oil group companies in the second quarter of 1927 will amount to $54,275,766, according to C. H. Pforzheimer & Co., specialists in Standard Oil securities. This total, despite unsettled conditions in the petroleum industry, establishes a new high record for any second quarter in previous years.

Second quarter dividends compare with $55,873,413 in the first quarter and $50,618,451 in the second quarter of 1926. Dividends for the first half of 1927 total $110,149,179 against $109,112,826 in the previous six months and $91,198,768 in the first half of 1926. Dividends paid in the first quarter of this year included $990,000 extra by Cumberland Pipe Line Co. and $1,000,000 extra by Southern Pipe Line Co., both payments representing part liquidation of securities outside of the companies' business. In the second quarter Crescent Pipe Line Co. paid $916,800, which was $15.28 a share in final liquidation.

The primary reason for the decline in dividends in the second quarter as compared with the first quarter was due to the retirement of the preferred stock of the Standard Oil Co. of New Jersey on which quarterly dividends amounted to $3,499,525. This, however, was partly offset by an increase in the common stock of that company. The company maintained the extra dividend of 12½ cents a share in addition to the regular payment of 25 cents a share on the increased amount of stock which resulted in an increase in dividends on the common stock of approximately $1,300,000.

Standard Oil Co. of California omitted the extra dividend of 12½ cents a share which was paid in the first quarter of the year, which accounted for a reduction of $1,574,262 in the quarterly payment. Standard Oil Co. of Kentucky also omitted the extra dividend of 50 cents, reducing the payment by about $400,000 and Continental Oil Co's dividends were approximately $200,000 less.

The record of quarterly cash disbursements since the dissolution are shown in table below.

	First	Second	Third	Fourth	Total
1927	$55,873,413	$54,275,766	.....	.....	.....
1926	40,588,317	‡50,618,451	$46,427,278	$62,685,548	$200,321,594
1925	34,355,618	41,905,728	35,140,584	42,104,169	153,506,099
1924	34,975,867	40,699,592	34,712,810	40,000,286	150,388,555
1923	33,499,988	36,311,251	31,066,251	37,545,805	138,423,295
1922	28,206,068	29,205,349	28,628,099	*43,000,349	129,039,865
1921	28,987,611	29,131,727	27,609,227	29,586,727	115,294,292
1920	26,796,606	27,313,396	29,804,557	31,861,824	115,776,793
1919	26,759,502	26,397,119	24,418,169	28,326,687	105,901,477
1918	26,483,747	26,759,002	26,204,915	24,035,252	103,480,916
1917	23,097,668	26,428,252	22,968,751	27,463,252	99,957,923
1916	22,179,086	†30,406,454	21,980,168	24,062,168	98,627,871
1915	15,241,966	14,368,636	15,891,966	16,898,636	62,401,204
1914	17,904,636	16,426,306	14,430,626	14,931,306	62,692,884
1913	§55,652,423	15,552,096	15,213,746	21,377,096	107,795,361
1912	10,220,396	11,983,746	13,190,396	16,392,096	51,686,634

* Includes aggregate extra disbursements of $11,600,000 by four eastern pipe line companies.

† Includes $6,613,786 disbursed by National Transit Co. in adjustment of capitalization.

§Includes $39,335,352 disbursed by Standard Oil Co. of New Jersey from repayment of loans to former subsidiaries.

‡Includes $4,000,000 paid by Southern Pipe Line Co. in final liquidation.

Marland Omits Dividend; Tide Water Cuts Rate

CLEVELAND, June 11.—Marland Oil Co. is the latest company to pass a dividend. Marland since December, 1925, has been paying $1 a share a quarter. In the second and third quarters of 1926 Marland paid 75 cents a share.

Simms Petroleum Co. omitted its dividend of 37½ cents a share a quarter three weeks ago. Tide Water Oil Co. directors this week reduced rate of that company's common stock dividends from 37½ to 20 cents a share.

Standard Oil Co. of Kentucky directors declared the regular $1 a share a quarter dividend but omitted the 50 cents a share extra it paid in the preceding quarter.

Condition of oil industry has made advisable the conservation of cash, Marland, Simms and Tide Water announced.

Mid-Continent Petroleum Corp.—All directors and officers re-elected at annual meeting.

Gain in Export Volume Small This Year

CLEVELAND, June 11.—Exports of crude oil and the major liquid products of petroleum in the first four months of 1927 were only slightly ahead of exports of these commodities in the first four months of 1926 in volume but behind in value, according to statistics of the Bureau of Foreign and Domestic Commerce. Wax exports have slumped in both volume and value. The only large gains in exports have been made by mineral spirits, a substitute for turpentine, asphalt, and light packaged lubricating oils.

Exports of the crude and the major liquid products in the two four-month periods compare:

	1927	1926
Crude, bbls.	4,738,736	4,504,285
Gasoline, bulk, bbls.....	11,748,501	11,628,312
Gasoline, cased, bbls...	1,791,029	1,976,109
Kerosene, bulk, bbls.....	4,404,250	5,095,974
Kerosene, cased, bbls...	1,744,212	1,908,235
Gas and fuel oil, bbls.	12,966,028	11,328,227
Red and pale oils, bbls.	1,909,833	1,830,105
Cylinder stocks, bbls....	957,149	1,077,443
Black oil, bbls.	212,608	224,064
Total, bbls.	40,472,346	39,572,754

Exports of wax and the specialties were:

	1927	1926
Wax, refined, lbs.....	88,881,096	93,456,928
Wax, unrefined, lbs.....	17,887,455	20,878,359
Residuum, bbls.	24,203	22,571
Mineral spirits, gals...	1,510,793	391,707
Transformer oil, gals.	1,120,283	896,772
Packaged light lubes, gals.	32,720,803	33,062,463
Greases, lbs.	169,801	120,958
Asphalt, tons	107,038	45,155
Coke, tons	32,623	23,457

(Continued on Page 111)

Cleveland Stock Market

June 10

	Par Value	Bid	Asked	Last Sale
Canfield Oil Co.....	100	.....	....	110
do pfd.....	100	100½	....	100
Fred G. Clark Co.....	10	....	33¾	33⅜
National Refining Co....	25	36½	37¼	36½
do pfd.....	100	133½	....	134
Paragon Refining Co.....	25	7¼	7¾	7
do pfd.....	100	72	....	71

x Ex dividend.

Oil Dividends

	Amount	Payable	Stock of record
Humble O. & R. q.....	30c	July 1	June 11
Lone Star Gas q.....	50c	June 30	June 20
Salt Creek Cons. q.....	20c	July 1	June 15
Shaffer O. & R. pfd. q...1¾%		July 25	June 30

Transactions In Oil Shares on New York Stock Exchange

1926 High	1926 Low	1927 High	1927 Low	Listed Capital	Par Value	Stocks	Div. Rate	Last Paid	Transactions Week Ended June 11 Sales	First	High	Low	Last	Change
32⅞	24¼	37⅝	27⅝	(sh) 915,675	N.P.	Amerada Corp.	50cQ	Apr. 30, 27	11,600	32	33¼	31¾	31¾	— ¾
74	39⅞	62½	35⅛	(sh) 209,180	N.P.	American Republics	.....	.....	7,000	44	*62½	44	58	+14
59½	44¾	50¼	44⅛	$ 56,000,000	$25	Associated Oil	50cQ	Mar. 25, 27	.....	.....	.....	.....	.....	.....
128⅜	97	125⅝	107	50,000,000	100	Atlantic Refining	$1Q	June 15, 27	82,700	111¼	*125⅝	111⅛	124½	+ 2⅜
120	115½	118	115½	20,000,000	100	do pfd.	$1¾Q	May 2, 27	100	116½	116½	116½	116½	0
33½	23½	35½	23⅛	25,000,000	25	Barnsdall Corp. A	62½cQ	Apr. 5, 27	23,900	25⅜	28	25⅜	28	+ 2⅜
29½	22½	32½	22	3,840,275	25	do B	62½cQ	Apr. 5, 27	1,300	25⅜	25⅞	25⅛	25⅛	— ⅛
68⅛	29¾	32⅛	21½	49,505,175	25	California Petroleum	50cQ	June 1, 27	13,900	24⅝	25⅜	24¼	24⅜	+ ¼
94¼	50	96¾	72½	24,242,500	100	General Asphalt	.....	.....	31,700	77	80	76	76⅝	+ ⅛
140½	94⅞	144⅞	113	6,949,200	100	do pfd	$1¼Q	June 1, 27	.....	.....	.....	.....	.....	.....
72	50¼	166½	60⅛	25,000,000	100	Houston Oil	.....	.....	149,000	158½	*166½	153	162⅛	+ 3¼
84	19⅝	32¾	17⅝	(sh) 500,000	N.P.	Independent Oil & Gas	25cQ	Apr. 18, 27	8,500	18⅝	21⅜	18⅝	19	+ ¼
13¾	7¼	11½	7⅛	$ 3,280,340	$10	Indian Refining	.....	Dec. 15, 20	2,500	8¾	8⅞	8⅝	8⅝	0
12½	8	10⅞	7⅝	4,550,110	10	do ctfs.	.....	.....	6,600	8	8⅝	8	8½	+ ½
104	90	112	102	2,296,400	100	do pfd.	.....	Dec. 15, 21	700	102¼	110⅜	102¼	110⅜	+ 8⅛
.....	.....	.....	.....	.....	.....	Kansas & Gulf	.....	.....	.....	.....	.....	.....	.....	.....
24½	19⅛	32½	20½	(sh) 3,988,044	N.P.	Lago Oil & Transport	75cQ	May 1, 27	1,900	26⅞	27¾	26⅝	26⅝	0
19⅞	12	18⅜	11½	(sh) 1,135,662	N.P.	Louisiana Oil Refining	.....	.....	12,100	11¾	13	11⅝	12½	+ 1
98	93	97	90	$ 4,000,000	$100	do pfd.	$1¾Q	May 16, 27	700	91¾	92½	91	91¾	+ ¼
28⅞	16½	22¾	13¼	(sh) 330,000	N.P.	Maracaibo Oil	.....	.....	1,300	14	14⅞	14	14½	+ ½
63⅜	49¼	58½	35⅜	(sh) 2,308,064	N.P.	Marland Oil Co.	$1Q	Mar. 31, 27	134,100	36¾	38⅝	†35⅝	36	— ¾
250	225	250	200	$ 45,942,800	$100	Mexican Petroleum	$3Q	Apr. 20, 27	20	250	*250	250	250	+25
.....	.....	.....	.....	12,000,000	100	do pfd.	$2Q	Apr. 20, 27	.....	.....	.....	.....	.....	.....
13¾	6	9¼	5	(sh) 945,939	N.P.	Mexican Seaboard	.....	Nov. 15, 24	2,100	5½	5¾	5¾	5½	0
37	27½	39⅜	29	(sh) 1,357,800	N.P.	Mid-Continent Petroleum	75cQ	May 1, 27	13,100	31	32⅛	30¾	31½	+ ¾
104¼	90	105	97	$ 6,718,000	$100	do pfd.	$1¾Q	June 1, 27	100	102½	102½	102½	102½	+ 4
2½	¾	3¼	1⅝	24,726,130	10	Middle States	.....	July 1, 23	13,700	2½	2¾	2½	2⅝	0
1¾	½	2¼	1⅛	5,074,090	...	do ctfs.	.....	.....	500	1⅞	2	1⅞	2	+ ¼
2¼	1	1⅞	1	(sh) 3,500,000	N.P.	Pacific Oil	.....	.....	2,000	1⅜	1¼	1⅜	1⅛	0
76½	56½	65⅞	56⅛	$ 48,307,400	$ 50	Pan American P. & T.	$1.50Q	Apr. 20, 27	8,400	58	59	56½	56½	— ½
78⅜	56⅛	66⅜	56⅜	121,096,950	50	do B	$1.50Q	Apr. 20, 27	35,300	57½	59⅞	56⅝	57¼	— ¼
46	30	37⅞	19	(sh) 400,000	N.P.	Pan American Western B.	.....	Jan. 30, 27	2,700	20¼	22⅞	20¼	20¾	+ ¾
62	4½	18⅞	8	(sh) 198,770	N.P.	Panhandle P. & R.	.....	.....	14,100	10	12⅞	9¾	10	+ ½
99⅜	51	83¾	64	$ 2,935,200	$100	do pfd.	.....	July 2, 23	200	64	65	†64	64	— 4½
57⅜	40	60¼	39¾	(sh) 2,406,796	N.P.	Phillips Petroleum	75cQ	Apr. 1, 27	104,000	43⅜	45¼	43½	43¾	+ ⅜
1⅞	⅛	1	⅛	$ 29,622,925	$ 25	Pierce Oil Corp.	.....	.....	30,500	½	*1	½	⅞	+ ⅜
27⅛	11½	20⅞	13½	15,000,000	100	do pfd.	.....	Feb. 1, 22	1,600	18	*20⅞	18	20	+ 1½
7	2¼	4	2½	(sh) 2,500,000	N.P.	Pierce Petroleum	.....	.....	33,500	3⅜	*4	3¾	3¾	+ ⅜
20¾	11	33⅞	16¾	$ 11,467,850	$50	Producers & Refiners	.....	Sept. 15, 23	55,400	29	31½	29	29½	+29⅜
41¾	30¾	50	36⅞	2,845,350	50	do pfd.	.....	May 1, 25	350	45½	45⅞	43¾	44¼	— ¾
31	25¼	33½	26	75,929,250	25	Pure Oil Co.	‡37½cQ	June 1, 27	24,500	26¼	27⅜	26¼	26⅝	+ ⅜
112¾	106	114	111⅜	13,000,000	100	do 8% pfd.	$2Q	Apr. 1, 27	.....	.....	.....	.....	.....	.....
57⅜	47⅜	58	48½	(sh) 628,559	13.40	Royal Dutch, N. Y. shares	$133⅓	Jan. 28, 27	400	49	49⅜	49	49	0
40⅝	40½	47⅞	43⅝	(sh) 83,152	F2	Shell Transport & T	96.7c	Jan. 17, 27	100	45¼	45¼	45¼	45¼	— ¾
31	24	31¾	25	(sh) 10,000,000	N.P.	Shell Union Oil	35cQ	Mar. 31, 27	1,000	27½	29⅞	27½	27¾	+ ⅛
114	103	111	107½	$ 18,350,400	$100	do pfd.	$1½Q	May 16, 27	.....	.....	.....	.....	.....	.....
28⅝	15⅛	22¾	15¾	7,208,080	10	Simms Petroleum	37½cQ	Apr. 1, 27	11,000	16½	17¼	16¼	16¼	0
24⅛	16¾	22⅜	16½	(sh) 4,501,224	N.P.	Sinclair Consolidated	.....	May 31, 24	30,100	17	18¼	16⅞	17	0
99½	90	103¼	97	$ 17,210,000	$100	do pfd.	$2Q	May 16, 27	700	99⅞	100	99½	99¾	+ ¾
37⅛	26⅝	37⅜	25	27,398,500	25	Skelly Oil Co.	50cQ	June 15, 27	11,600	27⅜	28¼	27	27⅝	+ ⅜
63⅝	52⅝	60¾	50⅜	(sh) 13,016,434	N.P.	S. O. California	‡62½cQ	June 15, 27	15,500	53½	55	53⅜	54½	+ 1¼
46⅜	37⅜	41⅜	35⅛	$ 604,484,600	$25	S. O. New Jersey	‡25cQ	June 15, 27	49,800	36⅞	37¾	36¾	37⅜	+ ¼
33¼	32½	34⅛	30⅛	421,498,275	25	S. O. New York	40cQ	June 15, 27	40,000	30⅜	30⅜	30¼	30½	0
41⅝	30⅛	34⅞	30	(sh) 1,171,474	N.P.	Sun Oil	25cQ	June 15, 27	5,000	30¾	32⅜	30¾	31¾	+ ⅜
5¼	1	6½	3¾	(sh) 1,121,368	N.P.	Superior Oil Corp.	.....	Dec. 20, 20	29,700	4	5⅛	3⅞	4⅛	+ ⅛
57⅞	53⅛	58	45	$ 179,752,525	25	The Texas Corp.	75cQ	Apr. 1, 27	35,100	48	48¾	47⅞	48⅛	+ ¼
19½	12	18⅞	12	8,380,340	10	Texas Pacific Coal & Oil	15cQ	Mar. 31, 27	197,400	12¼	*18⅞	12¼	15	+ 2⅜
39¼	37	29⅛	22⅞	(sh) 2,157,991	N.P.	Tide Water Oil Co.	37½cQ	Mar. 31, 27	700	...	24	23	23⅜	+ 1
103	87¼	89¾	87	$ 20,705,100	$100	do 5% pfd.	$1.25Q	May 16, 27	600	88	**	86	88	0
....	....	19⅛	15½	(sh) 4,791,410	N.P.	Tide Water Associated	30cQ	May 2 27	449,000	5⅜	*7½	5¼	6⅜	+ 1½
...	...	90¾	90	$ 76,347,100	$100	do pfd.	$1.50Q	Apr. 1, 27	6,800	42⅛	43⅜	42	42⅞	+ ⅜
5½	3	7½	3¾	(sh) 3,742,029	N.P.	Transcontinental Oil	.....	.....	6,000	109⅜	*115½	109⅜	117½	— ¾
58⅜	37¼	56½	39⅜	$ 40,741,725	$ 25	Union Oil of California	50cQ	May 10, 27	400	23½	23½	23½	23½	0
120⅜	84¼	115½	94	30,734,000	100	Union Tank Car Co.	$1¼Q	June 1, 27	77,400	16¼	*19⅛	16¼	18	+ 1½
29¾	25⅛	27½	22	(sh) 490,000	N.P.	White Eagle Oil & Refining	50cQ	Apr. 20, 27	700	90⅜	90⅜	90	90	+ ⅞

*New High †New Low xEx-Dividend ‡Also extras Total Sales 1,800,670

NEW YORK BONDS

Week Ending June 11

	High	Low	Last	Ch'ge
Amer. Rep. Deb. 6s.....	93	93	93	0
Assoc. Oil gold 6s.....	102¾	102½	102¾	+ ¼
Atlantic Refg. deb. 5s....	101¾	101½	101	0
Barnsdall Corp. 6s.....	100⅛	99¼	100	+ ¼
Barns. Corp. 6s ex war...	91	90¼	90½	— ⅛
Cal. Petrol. 5s.....	93¾	93	93¾	+ ¾
Cal. Petrol. 5½s.....	97¾	97½	97¾	— ¼
Empire Gas & Fuel 7½s.	110	109½	109⅞	0
Empire Gas & Fuel 6½s.	105½	105¼	105⅜	+ ⅛
Gen. Asphalt 6s.....	108	107½	108	+1
Gen. Petroleum 5s.....	100⅜	100½	100½	—1¼
Humble Oil & Refg. 5½s	102½	102⅛	102⅜	— ⅛
Humble Oil 5s wi.....	146	98¼	97½	— ½
Mid-Cont. Pet. 6½s....	104¼	104	104	— ¼
Pan.Amer. P. & T. 7s...	105¼	105¼	105¼	0
Pan-Amer. P. & T. 6s...	103¾	103	103¼	+ ¼
Pan-Amer. P. & T. 6s...	94	93⅝	93⅝	+ ¼
Pierce Oil deb. 8s.....	104½	102½	102½	—2¾
Prod. & Refnrs. 8s.....	.....	.....	.....	.....
Simms Pet. cvt. 6s.....	99¼	98¼	99¼	+1
Sinclair Con. Oil Col. 7s.	100⅛	99⅞	100	+ ⅛
Sinclair Con Oil Con. 6½s	96½	95½	96	— ⅜
Sinclair Con Oil 6s.....	100	99½	99⅞	0
Sinclair Crude Oil 6s....	100	99⅞	100	+ ⅛
Sinclair Pipe Line sf 5s..	93½	93¼	93½	0
Standard Oil N. Y. 4½s.	94⅜	94	94¼	— ⅜
Stnadard Oil N. J. deb. 5s	102¼	102	102⅛	— ⅛
Superior Oil 7s.....	103	103	103	+1¼
Tide Water Oil 6½s.....	.....	.....	.....	.....
Union Oil of Cal. 5s-C...	98½	97⅝	97⅝	— ⅜

Standard Oil Co. of New York—Board of directors enlarged to 14 members and Arthur F. Corwin elected to new seat. F. S. Fales was elected a vice-president and H. A. Wilkinson a secretary. Other directors and officers were re-elected.

PITTSBURGH STOCK EXCHANGE

1926 High	1926 Low	1927 High	1927 Low	Par Value	Stocks	Transactions Week Ended June 10 Sales	First	High	Low	Last	Ch'ge
8½	6⅝	...	...	N.P.	Andes Petroleum....	.....	.....	.....	.....	.....	.....
8½	5¾	8¼	6⅞	$ 10	Arkansas Nat. Gas..	15,452	7¼	8	7¼	7¾	+ ½
90½	79¾	98⅝	84	100	Columbia Gas.....	440	95½	95¾	94½	94½	— 1½
101⅜	95	107	100	100	do pfd.....	226	107	107	106	106	— 1
17	12½	15	9½	10	Devonian Oil.....	585	10¼	10⅝	10¼	10½	0
116½	112	116¾	115	100	Duquesne Lt. 7% pfd.	20	116	116	116	116	— ¼
10	5⅛	12¼	6	N.P.	Houston Gulf Gas..	20	10⅞	10⅞	10⅝	10⅝	— ⅜
46	39	46¼	37¼	$ 25	Lone Star Gas.....	1,438	43⅝	44	43½	43⅝	— ¼
47⅜	33⅛	22¾	22¼	25	Ohio Fuel Corp.....	**	.....	.....	.....	.....	.....
47½	42	21⅝	21	....	do ctfs.....	.....	.....	.....	.....	.....	.....
6¾	5	6	5	....	Ohio Oil & Gas.....	.....	.....	.....	.....	.....	.....
34	21	21	21	25	Oklahoma Nat. Gas.	.....	.....	.....	.....	.....	.....
21	19¼	23⅝	20¼	....	do ctfs..	865	23¼	23¼	23	23	— ¼
5⅜	3⅛	3⅞	3¼	5	Pittsburgh Oil & Gas	50	3¼	3¼	3¼	3¼	0
10	7½	8	6	10	Salt Creek Cons.....	282	6½	6⅞	6½	6⅞	+ ⅜
27	8	26½	17	10	Tidal Osage.....	500	19½	19½	19½	19½	+ ¾
45	40	43	41	N.P.	Waverly Oil Wks. "A"	150	42	42½	42	42½	+ ½

*New high †New high record

PITTSBURGH CURB EXCHANGE

1926 High	1926 Low	1927 High	1927 Low	Par Value	Stocks	Transactions Week Ended June 10 Sales	First	High	Low	Last	Ch'ge
3⅜	2½	3½	2¾	$ 5	Columbia Synd.....	.....	.....	.....	.....	.....	.....
20	.06	.18	.18	5	Duquesne Oil.....	.....	.....	.....	.....	.....	.....
22	22	...	...	10	Forest Oil.....	.....	.....	.....	.....	.....	.....
91½	85	94	88	25	Gulf Oil Corp.....	2,000	89½	89½	89½	89½	0
79	79	105	93	100	Houston Gulf Gas pfd	.....	.....	.....	.....	.....	.....
12	7½	10¾	6¼	N.P.	Leonard Oil & Dev...	7,700	7½	7⅞	7⅜	7⅜	+ ⅜
1⅝	1⅝	...	...	N.P.	Mountain & Gulf....	.....	.....	.....	.....	.....	.....
30¼	29	32	31¼	$ 25	Oklahoma Gas.....	.....	.....	.....	.....	.....	.....
....	....	1.20	1.00	....	Oklahoma Eastern....	.....	.....	.....	.....	.....	.....
2	.15	2.70	1.10	10	Omar Oil & Gas.....	3,600	1.70	1.75	1.40	1.50	—.15c
...	...	2¼	1¾	....	Pittsburgh Oil Dev...	.....	.....	.....	.....	.....	.....
2	1¾	2¼	2¼	5	do pfd.....	.....	.....	.....	.....	.....	.....
33½	20	31	24	10	Plymouth Oil.....	100	24	24	24	24	— 1
7	3	6	5½	5	States Oil.....	.....	.....	.....	.....	.....	.....
3½	2	3⅜	2	1	Texon Oil & Land...	2,200	2¼	2⅜	‡2	2	— ⅛
25¾	8	23¾	18	10	TidalOsage(non-vtg).	.....	.....	.....	.....	.....	.....

†New High Record xEx-Dividend ‡Ex-Rights

Standard Oil Stock Traded in New York

1926 High	1926 Low	1927 High	1927 Low	Outstanding Capital	Par Value	Stocks	Div. Rate	Last Paid	Transactions Week Ended June 10 Sales	First	High	Low	Last	Ch'ge
21	16⅜	21⅝	18⅜	£ 4,000,000	£ 1	Anglo-American Oil	36⅜cS.A.	Jan. 4, 27	400	18⅜	19	18⅜	19	+ ⅝
20¼	16½	20½	17⅞	.....	£ 1	do ctfs. non-voting	.....	.....	200	18	18½	18	18½	0
2¼	.75	1¼	.75	(sh) 500,000	N.P.	Atlantic Lobos	.....	.....	.....	.....	.....	.....	.....	.....
5	2⅞	4¼	2½	$ 10,000,000	$ 10	do pfd.	.....	.....	.....	.....	.....	.....	.....	.....
75	65	69	50	1,000,000	25	Borne Scrymser	$1S.A.	Apr. 15, 27	250	52	55	52	55	+ 3¾
59½	42	59	45	10,000,000	50	Buckeye Pipe Line	$1Q	June 15, 27	950	55	*59	55	59	+ 3½
82½	65	115	76½	3,000,000	25	Chesebrough Mfg.	$1Q	Mar. 31, 27	600	104¾	*115	104¾	110	+ 7½
25⅞	17½	22⅝	17⅜	38,805,260	10	Continental Oil	25cQ	June 15, 27	10,000	17½	18	17½	17⅞	0
137	102	137	89	3,000,000	100	Cumberland Pipe Line	$2Q	June 15, 27	200	92	93	92	93	+ 1
63¾	43	56¼	47	5,000,000	100	Eureka Pipe Line	$1Q	May 2, 27	50	56	56	56	56	0
32½	9⅛	13½	7½	16,000,000	100	Galena Signal Oil	.....	June 30, 25	100	7½	7½	7½	7½	— ½
94½	35	59¾	35	4,000,000	100	do new pfd.	.....	June 30, 26	120	35	37	35	37	+ 2
97½	40	60⅛	43½	2,000,000	100	do old pfd.	.....	June 30, 26	30	45	45	†43½	43½	— 1¾
99⅝	52	62¾	54	73,117,577	25	Humble Oil & Refining	‡30cQ	Apr. 1, 27	40,700	56½	60¼	55¾	58½	+ 2
144½	125¼	150	123¾	20,000,000	100	Illinois Pipe Line	$6S.A.	Dec. 15, 26	1,800	140	149½	140	143	+ 3
39¾	32½	47	37¾	(sh) 6,491,952	N.P.	Imperial of Canada	‡25cQ	June 1, 27	5,700	43¼	44	43¼	43½	+ ⅜
70	54¼	72½	61	$ 5,000,000	$50	Indiana Pipe Line	$1Q.	May 14, 27	500	67½	71	67½	70	+ 1½
35¼	28¾	34⅞	28½	(sh) 7,118,138	N.P.	International Petroleum	25c	Nov. 15, 26	18,600	29⅝	31¼	29½	30½	0
20¾	12½	17	13½	$ 6,362,500	$12½	National Transit Co.	25cQ	June 15, 27	800	16⅛	16⅛	16	16	— ⅛
51½	27⅛	36	31¼	5,000,000	100	New York Transit	.....	July 15, 26	100	36	36	36	36	+ 1½
80½	64	91	70	4,000,000	100	Northern Pipe Line	$3S.A.	Jan. 1, 27	100	87	*91	86½	91	+ 4
67⅝	55¾	64¼	52	60,000,000	25	Ohio Oil Co.	‡50cQ	June 15, 27	5,800	56½	58½	55½	57	+ ⅝
24¾	15	31	12	10,000,000	25	Penn Mex. Fuel	.....	May 21, 25	7,300	23½	*31	23¼	27	+ 5⅝
60¼	48	55⅛	45⅝	60,000,000	25	Prairie Oil & Gas	50cQ	May 31, 27	10,600	47⅜	49¾	47⅝	48	+ ⅜
137½	122¼	177	132	81,000,000	100	Prairie Pipe Line	$2.50Q	Apr. 30, 27	4,500	164	*177	164	171	+ 7¼
220	184½	201½	180	4,000,000	100	Solar Refining	$5S.A.	Dec. 20, 26	20	184	184	184	184	0
27	21	27¼	15½	5,000,000	50	Southern Pipe Line	.....	Mar. 1, 26	.....	.....	.....	.....	.....	.....
50	34½	41½	34½	20,000,000	25	South Penn Oil	50cQ	Mar. 31, 27	2,000	35⅜	38½	35⅜	36½	+ 1⅛
57	49	77	55½	3,500,000	100	South West Pa. Pipe Lines	$1Q	Apr. 1, 27	150	72	75	72	75	+ 3
70½	60½	74¼	64¾	228,415,463	25	S. O. Indiana	‡62½cQ	June 15, 27	18,700	67	67⅞	66¾	67⅝	+ ⅝
36½	16½	20⅞	15⅝	8,000,000	25	S. O. Kansas	.....	June 16, 24	300	16	16¼	16	16⅛	0
134¾	108	122¼	111⅝	17,012,599	25	S. O. Kentucky	$1Q	Mar. 31, 27	1,900	113	113¼	†111⅜	113	0
51⅛	42	49½	45	4,559,850	25	S. O. Nebraska	63cQ	Mar. 21, 27	100	45¼	45¼	45¼	45¼	+ ¼
672	288	86	73	14,000,000	25	S. O. Ohio	$2½Q	Apr. 1, 27	750	74½	78	74⅜	77½	+ 3
120½	116½	122	117¼	7,000,000	100	do pfd.	$1¾Q	June 1, 27	60	120	120	120	120	+ 1
23	15½	17⅝	14½	861,466	25	Swan Finch Co.	.....	Nov. 1, 19	150	16½	17	16½	17	+ ⅜
109¾	90¼	134	95⅛	62,470,809	25	Vacuum Oil	‡50cQ	Mar. 19, 27	27,100	125	*134	125	125¾	— 1¼

* New high †New low xEx dividend ‡Also extras.

New York Curb Market

1926 High	1926 Low	1927 High	1927 Low	Par Value	Stocks	Transactions Week Ended June 10 Sales	First	High	Low	Last	Change
6¾	45	2⅛	.76	$5	Amer. Con. Oilfields	14,000	80	90	80	90	+ 7
14½	4	7½	3¾	N.P.	Amer. Maracaibo	5,200	4⅛	4⅛	†3¾	3⅞	— ⅛
8⅜	5¾	8⅝	6¾	$10	Arkansas Nat. Gas.	500	7½	7⅞	7½	7½	+ ⅛
20⅜	14⅛	20½	15½	N.P.	Beacon Oil	.....	.....	.....	.....	.....	.....
85¼	60	27	20½	N.P.	British American	300	.....	25¾	24½	25¾	— ¼
28⅜	9¼	28¼	14⅜	25c	Carib Syndicate	4,200	16	7⅝	16	16⅜	+ ⅜
....	....	26	16½	....	do ctfs. of deposit	.....	.....	.....	.....	.....	.....
51	37½	58¾	40¼	$20	Cities Service	28,500	45¾	46⅞	45¾	46⅞	+ ⅞
92½	82⅜	92¼	87	100	do pfd.	1,700	89⅞	89⅞	89½	89½	— ⅜
8⅜	7⅜	8½	7⅜	10	do pref. B	500	8¼	8⅜	8¼	8⅜	0
25¼	19	29¼	23½	10	do bankers' shares	.....	.....	.....	.....	.....	.....
3½	1⅜	3⅜	1⅜	$1	Colombia Syndicate	9,000	2	2⅛	1⅛	2	0
10⅛	8⅛	9½	8¼	10	Consolidated Royal	.....	.....	.....	.....	.....	.....
16	10	14⅞	9⅜	N.P.	Creole Syndicate	4,600	10	10⅜	10	10⅜	0
7⅜	1⅜	3	1	N.P.	Crown Central	1,200	....	1¼	1⅛	1¼	— ⅛
8½	½	12	4¾	....	Darby Petroleum	100	....	7¾	7	7½	+ ⅛
....	....	11½	7	....	do trust ctfs.	.....	.....	.....	.....	.....	.....
4	1¾	2½	1¼	N.P.	Derby Oil & Refining	.....	.....	.....	.....	.....	.....
19	13	16¾	10	N.P.	do pfd.	.....	.....	.....	.....	.....	.....
7½	2½	3¾	1⅝	N.P.	Gibson Oil	29,400	1¾	2½	1¾	2⅛	+ ⅜
2	.63	1⅜	40	N.P.	Gilliand ctfs.	.....	.....	.....	.....	.....	.....
98	82	96½	86¼	$25	Gulf Oil Corp.	6,400	89	95	89	91⅛	+ 2⅜
3⅜	1	2¼	1¼	N.P.	Kirby Petroleum	400	....	1½	1⅜	1⅜	— ⅛
12¼	5¾	10⅞	6	N.P.	Leonard Oil & Dev.	4,300	7⅛	7¾	7⅛	7⅛	0
27	20	27½	22	N.P.	Lion Oil & Refg.	800	22¾	24	22¾	24	+ ½
46	31	46½	37	$25	Lone Star Gas	2,500	43¼	44	43⅛	43¾	+ ¼
2¾	2	2⅞	1¼	1	Magdalena Synd.	2,900	....	1⅜	1¼	1⅜	0
5½	1⅞	3	1½	10	Mexican-Panuco	.....	.....	.....	.....	.....	.....
1¾	1¼	1½	1	1	Mountain & Gulf	3,100	....	1¼	†1	1¼	0
26	23	26⅞	22¾	10	Mountain Producers	4,500	24¾	25	24¾	24⅞	+ ¼
6¾	5	5⅞	4⅞	5	New Bradford	500	5⅛	5⅛	5	5	0
11¾	2	6¼	4	10	New England Fuel	.....	.....	.....	.....	.....	.....
17	9⅛	16	9¼	1	New Mex. & Ariz.	80,000	12⅝	*16	12	12¾	+ ¼
17	8	13	9	25	New York Oil	2,300	12	12¼	10⅛	10½	— 1⅝
12⅛	8¾	12⅝	11⅛	N.P.	North Cent. Texas	.....	.....	.....	.....	.....	.....
44¾	33	....	....	$25	Ohio Fuel Corp.	.....	.....	.....	.....	.....	.....
33	28½	27½	21¼	....	Okla. Nat. Gas ctfs.	100	23	23	23	23	— ⅜
10⅜	5⅞	9⅜	5	N.P.	Pandem	3,900	5⅛	6	5	6	+ ½
12¼	11¾	12⅛	9¾	N.P.	Pantapec Oil	4,900	9¾	10⅜	9¾	10¼	+ ¼
2¾	.20	.37	.26	N.P.	Peer Oil Corp.	.....	.....	.....	.....	.....	.....
22¾	12	13½	7	$10	Pennok Oil	600	7⅜	7⅜	†7	7⅛	— ⅜
38	14⅛	24⅜	16	25	Red Bank Oil	100	18	18	18	18	+ 2
30¼	12	15½	5	N.P.	Reiter-Foster	1,300	5½	5¾	5½	5½	0
27½	22	27½	15	$25	Richfield Oil	400	19⅞	21	19⅞	21	+ 1⅛
7½	4½	7	4½	N.P.	Ryan Consolidated	1,800	4⅝	6⅜	4½	6	+ 1½
10	7½	8	6	$10	Salt Creek Cons.	100	6½	6½	6½	6½	0
36	26⅞	32	27¼	10	Salt Creek Prod.	3,900	29¼	30	29⅛	29½	+ ⅜
4⅜	1⅛	7	3	5	Savoy Oil	100	3¾	3¾	3¾	3¾	+ ½
27	7⅝	26⅛	17	10	Tidal Osage	800	....	21⅝	19	21⅝	+ 2⅝
25¾	7⅞	23¾	15	10	do non-voting	2,000	....	21½	18	21½	+ 2½
....	....	83	63½	100	Transcontinental pfd.	1,425	74	*83	74	77	+ 3
3	4⅛	7⅜	4¼	5	Venezuelan Petro.	2,100	4½	4½	†4¼	4½	0
30⅛	23⅞	27⅞	23½	N.P.	Warner-Quinlan	.....	.....	.....	.....	.....	.....
31⅜	22	32⅝	20⅜	N.P.	Wilcox Oil & Gas	800	23⅝	24	23⅝	23⅝	— ⅛
9½	4⅜	8	5¼	$1	Woodley Petroleum	500	5¾	7	5¾	7	+ 1¼

*New High †New Low xEx-Dividend

NEW YORK CURB BONDS

Week Ending June 10

	High	Low	Last	Ch'ge
Beacon Oil 6s '36	99	98⅜	98¾	— ¼
Cities Serv. 5s '56	91¾	91¾	91¾	0
Cities Serv. 6s '66	101⅛	101	101	0
Empire Oil 5½s wi	96⅛	96	96	0
General Pet. 6s '28	101⅛	100¾	100¾	+ ¼
Gulf Oil 5s '37	99¾	99¼	99¾	+ ⅝
Indepen. Oil 6s '39	99	99	99	0
Pennok Oil 6s '27	100	100	100	0
Phillips Pet. 5½s	99¼	99¼	99¼	— ¼
Pure Oil 6½s '33	104	103⅝	104	+ ⅜
Richfield Oil 6s wi '41	94	94	94	— ⅛
Shell Un. Oil 5s	99½	99⅜	99½	0
Skelly Oil 5½s, '39	95¼	95	95	0
S. O. N. Y. 6½s '33	104¾	104½	104½	— ⅛
Sun Oil 5½s '39	101	100¾	100½	+ ¼
Trans. Cont. Oil 7s '30	103⅞	98½	103	0
United Oil Prod. 8s '31	75¾	75¾	75¾	0

Standard Oil Co. of New York.—Increase in capital stock from $400,000,000 to $137,500,000 to provide for sale of shares to employes approved at annual meeting. Directorate increased by one to 14 and Arthur F. Corwin elected to new seat. F. S. Falls elected vice-president and H. A. Wilkinson secretary to succeed Mr. Falls.

Illinois Jobbers to Meet at Decatur

SPRINGFIELD, Ill., June 13.—Because of Mississippi's high water, the June 22 meeting which was scheduled for Quincy, Ill., will be held at Decatur, according to "The Oil Can", the association's official publication.

No change in date of the meeting has been made.

Magnolia Pipe Line Runs for May

HOUSTON, June 10.—Magnolia Petroleum Co. pipeline department, announces from Dallas headquarters the following crude oil runs for May, which are shown in comparison with April:

Hewitt-Graham	162,037.99	209,410.71
Healdton	233,546.96	218,843.70
Cushing	159,790.77	162,762.43
Yale	65,438.24	68,961.14
Cement	20,603.36	15,439.92
Duncan	52,808.42	54,453.29
Augusta	46,348.49	50,394.88
Walters-Beaver Creek	8,688.22	9,668.17
Burbank	39,614.90	19,060.70
Wewoka	461,163.52	643,761.48
Bristow	.....	.....
Seminole	312,028.34	185,270.65
Total Okla.—Kans.	1,562,069.21	1,638,027.07
Archer	70,979.07	62,912.12
Burkburnett	78,232.62	83,047.19
Coleman	.....	140.59
Comanche	21,052.22	21,933.39
Electra	120,378.09	116,338.83
Corsicana Heavy	8,240.58	8,769.92
Corsicana Light	26,090.11	25,305.37
Henrietta	4,710.28	4,556.43
Iatan	13,847.91	21,676.56
Luling	436,875.08	432,857.01
Lytton Springs	48,807.48	44,122.08
Mexia--Wortham	51,007.41	51,148.69
Mirando	114,486.00	106,476.26
Olden	13,973.72	12,949.12
Panhandle	227,845.57	230,470.04
Panola	1,415.81	914.62
Stephens	10,937.64	11,044.27
Thrall	1,302.51	1,213.05
Gulf Coast	35,702.28	76,244.43
Crane County	7,871.50	23,901.47
Total Texas	1,293,755.88	1,336,021.14
Haynesville	4,117.36	3,987.10
Bull Bayou	33,433.27	30,501.18
Cotton Valley	37,999.11	41,177.47
Pine Island	34,076.48	36,429.17
Total Louisiana	109,626.22	112,095.45
El Dorado Light	26,037.78	27,021.92
East El Dorado	2,538.80	3,270.28
Smackover	108,575.23	135,255.67
Total Arkansas	137,151.81	165,547.87
GRAND TOTAL	3,102,603.12	3,251,691.53

Oklahoma—Kansas

Report for May		Daily Average
Runs	1,638,027.00	52,840.00
Shipments	1,309,388.00	42,238.00

Texas

Wichita, Wilbarger, Archer	Runs	266,292	8,590
	Shipments	290,683	9,377
Petrolia	Runs	4,556	147
	Shipments	4,556	147
Eastland, Stephens	Runs	45,927	1,482
	Shipments	68,304	2,203

TOTAL STOCKS....352,572.00 North Cent. Tex.

Gain in Exports Small

(Continued from Page 108)

Values of the various commodities in the two periods were:

	1927	1926
Crude	$8,130,032	$8,204,085
Gasoline, bulk	61,720,319	64,525,852
Gasoline, cased	16,822,201	20,001,272
Kerosene, bulk	16,232,863	17,688,686
Kerosene, cased	12,465,395	13,187,415
Gas and fuel oils	16,386,763	14,754,504
Red and pale oils	15,676,927	14,616,797
Cylinder stocks	12,145,233	13,736,864
Black oil	1,035,393	1,230,633
Total major liquid	$160,615,126	$167,946,138
Wax, refined	4,730,207	5,107,107
Wax, unrefined	816,555	1,009,050
Total major	$166,161,888	$174,362,295
Residuum	150,744	100,097
Mineral spirits	263,643	85,783
Transformer	334,027	304,415
Packaged light lubes	158,864	123,280
Greases	5,546,762	6,415,157
Asphalt	2,438,703	1,077,021
Coke	383,049	267,790
Total specialties	$ 9,275,792	$ 8,373,643
GRAND TOTAL	175,437,680	182,735,938

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Braun & Co., C. F.
Brown Sheet Iron & Steel Co. 100
Buckeye Boiler Co. 53
Buckeye Iron & Brass Works 2
Budd Wheel Co.
Buffalo Meter Co. 48
Burrell Co., G. A.
Butler Mfg. Co.
Byron, Jackson Pump Co.

Campbell, J. A.
Canfield Oil Co., Cleveland
Carbide & Carbon Chemical Corp.
Celite Products Co.
Central Commercial Co. 56-60-64-74-88-95
Champion Pneumatic Mach. Co.
Champion Tank & Mfg. Co.
Champlin Refining Co.
Chestnut & Smith Corp. 71
Chevrolet Motor Co.
Chicago Tribune 48
Chicago Tubing & Braiding Co. 89
Chipman Chemical Engineering Co., Inc.
Cincinnati Advertising Products Co.
Clark Co., Fred G.
Classified Advertising Section 111
Clear Vision Pump Co.
Cleveland Steel Barrel Co.
Columbian Steel Tank Co.
Continental Ref. Co.
Continental Supply Co.
Correct Measure Co.
Crown Central Petroleum Corp. Outside Back Cover
Curtis Pneumatic Machinery Co. 13
Cushing Refg. & Gasoline Co.

Davis Welding & Mfg. Co. Inside Front Cover
Dawes Electric Sign & Mfg. Co.
Dayton Air Compressors 90
Dayton Pump & Mfg. Co. 15
Dearborn Chemical Co.
Deepwater Oil Refineries
Des Moines Foundry & Machine Co.
Dibb Mfg. Co.
Dopp Company, H. W.
Draper Mfg. Co. Inside Back Cover
Dunn Manufacturing Co.
Dunning Compressor Co.

Eaton, J. E.
Edwards Mfg. Co.
Elk Refining Co.
Emerson-Scheuring Tank Co.
Empire Oil Works, Inc.
Empire Refineries, Inc.
Enameled Steel Sign Co.
Erie Meter Systems, Inc.
Ethyl Gasoline Corp. 79

Farrell Mfg. Co.
Fiske Bros. Refg. Co.
Flexlume Corp.
Foamite-Childs Corp.
Fogarty Mfg. Co., The
Foxboro Co., Inc.
Freedom Oil Works 76
Frontier Mfg. Co.

Gasoline Register Co.
General American Tank Car Corp.
Gilbert & Barker Mfg. Co. 10
Globe Mfg. Co.
Globe Oil & Refg. Co.
Gomory, W. L.
Graham Brothers
Graver Corp.
Gray Processes Corp.
Groetken Pump Co.
Guarantee Liquid Measure Co. 8-9
Guardian Safe Co.
Gulf Ref. Co. 80

Hardie Mfg. Co.
Hartol Products Corp.
Hayes Equipment Mfg. Co.
Haynes Stellite Co.
Heil Co., The
Heine Boiler Co.
Highland Body Mfg. Co.
Hope Engineering & Supply Co. 50
Hotel Gibson
Hughes Tool Co. 83
Hull Sign & Mfg. Co.
Humble Oil & Refining Co. 53
Huntley & Huntley
Hurt Engineering Corp., G. F.

Illinois Glass Co.
Imperial Oil Marketing Co.
Independent Oil & Gas Co. 16
Indiana Truck Corp. 58
Ingersoll-Rand Co.
International Derrick & Equip. Co. 49
International Harvester Co.
Irving-Iron Works Co.

Jenkins Bros.
Johns-Manville Corp. 61
Julian Pump Co.

Kanotex Ref. Co. 81
Keen & Woolf Oil Co.
Kellogg Co., M. W.
Kellogg Mfg. Co.
Kewanee Safe Co. 77
Klean-Rite Auto Laundry Co. 5

Larkin-Thuro Corp.
Leader Iron Works
Lewis-Shepard Co.
Lientz & Co., B. P.
Linde Air Products Co.
Lubricating Appliance Mfg. Co.
Luce Trunk Co. 95
Lummus Co., The Walter E. 66

Marion Machine, Foundry & Supply Co. 40
Marland Refg. Co.
Marnall Steel Co.
Mars Co.
Marvell Equipment Co
McDonald Mfg. Co., A. Y. 85
McKee & Co., Arthur G.
Merco Nordstrom Valve Co.
Merit Oil Equipment Co.
Metal Hose & Tubing Co. 92
Metric Metal Works
Miller & Co., Inc., Max B.
Miller Sons Co., A. D. 90
Milwaukee Tank Works 92
Moore & Co., Lee C. 37
Moore & Kling Inc.
Morrison Bros.
Moto-Service Elevator Co.

National Carbon Co., Inc.
National Checking Co.
National Lead Co.
National Oil Products Co. 57
National Petroleum News 12-94
National Pipe Products Corp 91
National Recording Pump Co
National Refining Co. 64
National Transit Pump & Machine Co. 89
Neil & Co., Wm.
Neil House, The
New York Lubricating Oil Co.
North American Car Corp.

Oakite Products, Inc. 60
Oil Conservation Engineering Co.
Oil Grease Pump Co., The 7
Oil Products Appliance Co.
Oil Well Supply Co.
Omar Refining Co.
Oxweld Acetylene Co. 69

Patriot Mfg. Co. 100
Pennsylvania Flexible Metallic Tubing Co.
Pennsylvania Pump Co., Inc.
Pennsylvania Refg. Co.
Perfection Mfg. Co.
Petroleum Iron Works Co.
Petroleum Products Corp. 60
Pforzheimer & Co., Carl H.
Phillips Petroleum Co.
Pittsburgh-Des Moines Steel Co.
Pittsburgh Machine Tool Co.
Platt Co., W. C. 102
Pneumatic Gasoline Service Co., The
Power Specialty Co. 54
Powerine Co., The 65
Pressed Steel Tank Co.
Prest-O-Lite Co.
Producers & Refiners Corp.
Professional Card Section
Pure Oil Co.
Pyrene Mfg. Co.

Quincy Compressor Co.

Rand McNally & Co.
Ranney Oil Mining Co.
Reading Iron Co. 45
Reading Steel Castings Co., Inc.
Reid Gas Engine Co., Joseph 47
Rhodes Co., Jay B.
Robertson Steel & Iron Co., W. F. 36
Roper Corp., Geo. D.
Roxana Petroleum Corp. 14

St. Louis Can Co.
St. Louis Pump & Equip. Co.
St. Louis Surfacer & Paint Co.
Safety Lift Co.
Schrayer & Co., Robert M. 56
Selden Truck Corp.
Service Station Equip. Co.
Shaffer Tool Works 74
Sharpesville Boiler Works Co.
Shaw, S. F.
Shotwell Pump & Tank Co. 77
Sinclair Refining Co. 96
Sisterville Tank & Boiler Works
Skelly Oil Co. 11
Smith Corp., A. O.
Smith Separator Co.
Southwestern Engineering Corp.
Sowers Mfg. Co.
Spears & Riddle Co. 78
Standard Boiler & Plate Iron
Standard Liquid Testing Devices, Inc.
Steel Drum Accessories Corp.
Stevens Grease & Oil Co., A. J. 91
Suender, W. Frederick 66
Sun Oil Company

Tagliabue Mfg. Co., C. J.
Taylor Instrument Companies
Texas Company, The
Texas Pacific Coal & Oil Co.
Tidal Refining Co.
Tokheim Oil Tank & Pump Co. 87
Transcontinental Oil Co. 73
Truscon Steel Co.

Union Metal Mfg. Co. 6
United Filters Corp. 78
U. S. Air Compressor Co.
United States Can Co., The
United States Cast Iron Pipe & Foundry Co.
Universal Oil Products Co. 33

Van Tine, C. C.
Viking Pump Co. 84
Vilter Mfg. Co.
Vogt Machine Co., Henry 4
Volcker Mfg. Co.

Wackman Welded Ware Co.
Wadhams Oil Co.
Walworth Co. 3
Warren Refining & Chemical Co. 31
Waukesha Motor Co. 29
Wayne Co.
West Penn Oil Co. 86
Westcott & Greis, Inc.
Wheaton Brass Works, A. W. 27
Wheeling Steel Corp. 39
White Co.
White Eagle Oil & Refg. Co.
Widdell Engineering Co., Inc.
Williams Sealing Corp.
Williamson Advertising Service, W. F.
Wilson & Bennett Mfg. Co.
Wilson Welder & Metals Co., Inc.

Youngstown Welding Co., The